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| <b>(51) International Patent Classification 5 :</b><br>C12N 15/11, C12Q 1/68                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | <b>A2</b> | <b>(11) International Publication Number:</b> WO 93/16178<br><b>(43) International Publication Date:</b> 19 August 1993 (19.08.93)                                                                                                                                                                                                                                                                       |
| <b>(21) International Application Number:</b> PCT/US93/01294<br><b>(22) International Filing Date:</b> 12 February 1993 (12.02.93)<br><b>(30) Priority data:</b><br>07/837,195 12 February 1992 (12.02.92) US<br><b>(71) Applicant:</b> THE UNITED STATES OF AMERICA, as represented by THE SECRETARY, DEPARTMENT OF HEALTH AND HUMAN SERVICES [US/US]; Washington, DC (US).<br><b>(72) Inventors:</b> VENTER, Craig, J. ; 1718 Nordic Hill Circle, Silver Spring, MD 20906 (US). ADAMS, Mark, D. ; 12812 Sage Terrace, Germantown, MD 20874 (US). MORENO, Ruben, F. ; 14415 Coral Gables Way, North Potomac, MD 20878 (US). |           | <b>(74) Agents:</b> ALTMAN, Daniel, E. et al.; Knobbe, Martens, Olson and Bear, 620 Newport Center Drive, 16th Floor, Newport Beach, CA 92660 (US).<br><b>(81) Designated States:</b> AU, CA, JP, European patent (AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE).<br><b>Published</b><br><i>Without international search report and to be republished upon receipt of that report.</i> |
| <b>(54) Title:</b> SEQUENCES CHARACTERISTIC OF HUMAN GENE TRANSCRIPTION PRODUCT<br><br><b>(57) Abstract</b><br><br>Partial and complete human cDNA and genomic sequences corresponding to particular expressed sequence tags (ESTs). The ESTs are cDNA sequences that are generally between 150 and 500 base pairs in length, are derived from human brain cDNA libraries, correspond to genes transcribed in human brain, and have base sequences identified herein as SEQ ID NOS: 1-2421.                                                                                                                                  |           |                                                                                                                                                                                                                                                                                                                                                                                                          |

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**SEQUENCES CHARACTERISTIC OF HUMAN GENE TRANSCRIPTION  
PRODUCT**

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**Technical Field**

The present invention relates to newly identified polynucleotide sequences corresponding to transcription products of human genes, and to complete gene sequences associated therewith.

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**Background**

This invention relates to human genes. Identification and sequencing of human genes is a major goal of modern scientific research. The sequence of human genes is more than just a scientific curiosity. For example, by identifying genes and determining their sequences, scientists have been able to make large quantities of valuable human "gene products." These include human insulin, interferon, Factor VIII, tumor necrosis factor, human growth hormone, tissue plasminogen activator, and numerous other compounds. Additionally, knowledge of gene sequences can provide the key to treatment or cure of genetic diseases (such as muscular dystrophy and cystic fibrosis). The present invention represents a quantum leap forward in mankind's knowledge of human gene sequences.

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There are several basic concepts of molecular biology which figure prominently in the invention. A brief explanation of those concepts follows. Additional background information and definitions for scientific terms can be found

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in the literature. See, for example, "Glossary of Genetics, Classical and Molecular" by R. Rieger, A. Michaelis, and M.M. Green (Fifth Edition, Springer-Verlag, New York (1991)). The contents of this and other publications cited in the  
5 specification are incorporated by reference herein.

At an initial level, the present invention is based on identification and characterization of gene segments. Genes are the basic units of inheritance. Each gene is a string of connected bases called nucleotides. Most genes are formed of  
10 deoxyribonucleic acid, DNA. (Some viruses contain genes of ribonucleic acid, RNA.) The genetic information resides in the particular sequence in which the bases are arranged. A short sequence of nucleotides is often called a polynucleotide or an oligonucleotide.

15 Like genes, polypeptides are built from long strings of individual units. These units are amino acids. The nucleotide sequence of a gene tells the cell the sequence in which to arrange the amino acids to make the polypeptide encoded by that gene. In general, chains of up to about 200  
20 amino acids are called polypeptides, while proteins are larger molecules made up of polypeptide subunits; both types of molecules are referred to generally herein as polypeptides. A triplet of nucleotides (codon) in DNA codes for each amino acid or signals the beginning or end of the  
25 message (anticodon). The term codon is also used for the corresponding (and complementary) sequences of three nucleotides in the mRNA into which the original DNA sequence is transcribed.

Generally, enzymes in the cell transcribe the permanent  
30 DNA of the gene into a temporary RNA copy, called messenger RNA or mRNA. The mRNA, in turn, can be translated into a polypeptide by the cell. This entire process is called gene expression, and the polypeptide is the gene product encoded by the gene.

35 Scientists have previously discovered how to reverse the transcription process and copy mRNA back into DNA using an



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enzyme called reverse transcriptase. The resulting is called complementary DNA, or cDNA. This is schematically shown in the single Figure. When substantially all of the mRNA from one cell or tissue is converted to cDNA at once and cloned into multiple copies of a recombinant vector to allow replication and manipulation in the laboratory, the result is called a cDNA library.

The various types of genes include those which code for polypeptides, those which are transcribed into RNA but are not translated into polypeptides, and those whose functional significance does not demand that they be transcribed at all. Most genes are found on large molecules of DNA located in chromosomes. Double stranded cDNA carries all the information of a gene. Each base of the first strand is joined to a complementary base (hybridized) in the second strand. The linear DNA molecules in chromosomes have thousands of genes distributed along their length. Chromosomes include both coding regions (coding for polypeptides) and noncoding regions; the coding regions represent only about three percent of the total chromosome sequence.

An individual gene has regulatory regions that include a promoter which directs expression of the gene, a coding region which can code for a polypeptide, and a termination signal. The regulatory DNA sequence is usually a noncoding region that determines if, where, when, and at what level a particular gene is expressed.

The coding regions of many genes are discontinuous, with coding sequences (exons) alternating with noncoding regions (introns). The final mRNA copy of the gene does not include these introns (which can be much longer than the coding region itself), although it does contain certain untranslated regions that usually do not code for the polynucleotide gene product. Untranslated sequences at the beginning and end of the mRNA are known as 5'- and 3'-untranslated regions,

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respectively. This nomenclature reflects the orientation of the nucleotide constituents of the mRNA.

5 A cDNA is a DNA copy of a messenger RNA, which contains all of the exons of a gene. The cDNA can be thought of as having three parts: an untranslated 5' leader, an uninterrupted polypeptide-coding sequence, and a 3' untranslated region. The untranslated leader and trailing sequences are important for initiation of translation, mRNA stability, and other functions. The untranslated leader and trailing sequences are called 5'- and 3'-untranslated sequences, respectively. The 3' untranslated sequence is usually longer than the 5' untranslated leader, and can be longer than the polypeptide-coding sequence. The untranslated regions typically have many, randomly-distributed stop codons, and do not display the nonrandom base arrangements found in coding sequences. The 5'-untranslated sequence is relatively short, generally between 20 and 200 bases. The 3'-untranslated sequence is often many times longer, up to several thousand bases.

20 The translated or coding sequence begins with a translational start codon (AUG or GUG) and ends with a translational stop codon (UAA, UGA, or UAG). Generally, translation begins at the first "start" codon on the mRNA and proceeds to the first "stop" codon. Coding sequences can be distinguished by their nonrandom distribution of bases; numerous computer algorithms have been developed to distinguish coding from noncoding regions in this way.

30 Human DNA differs from person to person. No two persons (except perhaps identical twins) have identical DNA. While the differences, called allelic variations or polymorphisms, are slight on a molecular level, they account for most of the physical and other observable differences between individuals. It has been estimated that approximately 14 million sequence polymorphism differences exist between individuals.

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The ability of one strand of DNA to attach or hybridize to a complementary strand has already been exploited for several purposes. For example, small pieces of DNA (15 to 25 base pairs long) can be made which will hybridize to longer strands of DNA which have a complementary sequence. These short "primers" can be selected such that they hybridize to a specific, unique location on the longer strand. Once the primers have hybridized to their target on the DNA, the polymerase chain reaction (PCR) can be employed to generate millions of copies of (or amplify) the particular segment of DNA between the locations to which two primers are bound. Briefly, this technique allows amplification of a DNA region situated between two convergent primers, using oligonucleotide primers that hybridize to opposite strands. Primer extension proceeds inward across the region between the two primers, and the product of DNA synthesis of one primer serves as a template for the other primer. Repeated cycles of DNA denaturation, annealing of primers, and extension result in an exponential increase in the number of copies of the region bounded by the primers.

Similarly, a labeled segment of single-stranded DNA can be hybridized to a longer DNA sequence, such as a chromosome, to mark a specific location on the longer sequence. Segments of DNA 50 bases long or longer that hybridize to a unique DNA location in the human genome are extremely unlikely to hybridize elsewhere in the human genome.

The Human Genome Project is an effort to sequence all human DNA (the human genome). The human genome is estimated to comprise 50,000 - 100,000 genes, up to 30,000 of which might be expressed in the brain (Sutcliffe, *Ann. Rev. Neurosci.* 11:157 (1988)). Once dedicated human chromosome sequencing begins in three to five years, it was expected that 12-15 years will be required to complete the sequence of the genome (Report of the Ad Hoc Program Advisory Committee on Complex Genomes, Reston, Va., Feb. 1988, D. Baltimore Ed. (NIH, Bethesda, Md, 1988)). At that rate, the majority of

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human genes would remain unknown for at least the next decade. The present invention can greatly accelerate the pace at which human genes can be identified and mapped. Most gene researchers, in conjunction with publication of their results in this field, submit sequence data to the GenBank database. Prior to the present invention, GenBank listed the sequences of only a few thousand human genes and less than two hundred human brain mRNAs (GenBank Release 66.0, December, 1990).

The role of sequencing complementary DNA (cDNA), reverse transcribed from mRNA, as a part of the human genome project has been vigorously debated since the idea of determining the complete nucleotide sequence of humans first surfaced. The coding sequence of all human genes represents most of the information content of the genome, but only 3-5% of the total DNA. In contrast, cDNA (which is only made from the transcription product of active genes) is one-half to three-fourths (the remainder being 5'- and 3'-untranslated sequence) meaningful genetic information. Thus, some have argued that cDNA sequencing should take precedence over genomic sequencing (Brenner, CIBA Found. Symp. 149:6 (1990)). However, until now, such arguments have not been heeded.

Genomic sequencing proponents have argued the difficulty of finding every mRNA expressed in all tissues, cell types, and developmental states, and that much valuable information from intronic and intergenic regions, including control and regulatory sequences, will be missed by cDNA sequencing. (Report of the Committee on Mapping and Sequencing the Human Genome, National Research Council (National Academy Press, Washington, D.C. 1988)). Further, sequencing of transcribed regions of the genome using cDNA libraries has heretofore been considered impractical or unsatisfactory. Libraries of cDNA were believed to be dominated by repetitive elements, mitochondrial genes, ribosomal RNA genes, and other nuclear genes comprising common or housekeeping sequences. It was believed that cDNA libraries would provide few sequences

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corresponding to structural and regulatory polypeptides or peptides. See, for example, Putney, et al., *Nature* 302:718-721 (1983). Putney, et al. sequenced over 150 clones from a rabbit muscle cDNA library and identified clones for 13 of the 19 known muscle polypeptides, including one new isotype but no unknown coding sequences.

Another perceived drawback of cDNA sequencing was that some mRNAs are abundant, and some are rare. The cellular quantities of mRNA from various genes can vary by several orders of magnitude. This led critics to believe that most information obtained from cDNA sequencing would be repetitious and useless.

The present invention demonstrates that, despite such skepticism, cDNA sequencing now provides a rapid method for obtaining enormous amounts of valuable genetic information and DNA products of great utility for the biotechnology and pharmaceutical industries. Not only can many distinct cDNAs be isolated and sequenced, even partial cDNAs can be used, with conventional, well-understood methods, to isolate entire genes, and to determine the chromosomal locations and biological functions of these genes. As is demonstrated here, fragments of only a few hundred bases are sufficient, in many cases, to identify the probable function of a new human gene if it is similar in structure to a gene from another animal, or from plants or bacteria. Similarly, even fragments of untranslated regions of a cDNA can be used to: i) isolate the coding sequence of the cDNA; ii) isolate the complete gene; iii) determine the position of the gene on a human chromosome, and hence the potential of the gene to cause a human genetic disease; and iv) determine the function of the gene by means of experiments in which the function of the native gene is disrupted by the addition of a short DNA fragment to the cell, e.g., using triple helix or antisense probes.

Because coding regions comprise such a small portion of the human genome, identification and mapping of transcribed

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regions and coding regions of chromosomes is of significant interest. There is a corresponding need for reagents for identifying and marking coding regions and transcribed regions of chromosomes. Furthermore, such human sequences are valuable for chromosome mapping, human identification, identification of tissue type and origin, forensic identification, and locating disease-associated genes (i.e., genes that are associated with an inherited human disease, whether through mutation, deletion, or faulty gene expression) on the chromosome.

#### SUMMARY OF THE INVENTION

Contrary to the expectations of the scientific community, cDNA screening and sequencing techniques have now been used to discover a large number of heretofore unknown human genes. Disclosed herein are over 2,400 new human polynucleotide sequences. These sequences could represent up to 5% of all human genes. The novelty of these sequences has been established through comparison to both nucleotide sequence databases and amino acid sequence databases. Surprisingly, over 80% of the sequences generated were unrelated to any sequences previously described in the literature.

The sequences of the present invention were ascertained using a fast approach to cDNA characterization. This approach could facilitate the tagging of most expressed human genes within a few years at a fraction of the cost of complete genomic sequencing, provide new genetic markers, provide new DNA-based therapeutics and diagnostics, and provide other valuable nucleotide reagents.

The sequences disclosed herein, styled Expressed Sequence Tags ("ESTs"), are markers for human genes actually transcribed in vivo. Techniques are disclosed for using these ESTs to obtain the full coding region of the corresponding gene. The use of ESTs, complete coding sequences, or fragments thereof for marking chromosomes, for

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mapping locations of expressed genes on chromosomes, for individual or forensic identification, for mapping locations of disease-associated genes, for identification of tissue type, and for preparation of antisense sequences, probes, and constructs is discussed in detail below. Unlike the random genomic DNA sequence tagged sites (STSs) (Olson et al., *Science* 245:1434 (1989)), ESTs point directly to expressed genes.

Various aspects of the present invention thus include the individual ESTs, corresponding partial and complete cDNA, genomic DNA, mRNA, antisense strands, triple helix probes, PCR primers, coding regions, and constructs. Also, where one skilled in the art is enabled by this specification to prepare expression vectors and polypeptide expression products, they are also within the scope of the present invention, along with antibodies, especially monoclonal antibodies, to such expression products.

#### BRIEF DESCRIPTION OF THE DRAWING

The single drawing Figure schematically illustrates the progression from chromosome to gene to mRNA to cDNA.

#### DETAILED DESCRIPTION OF THE INVENTION

The detailed description that follows provides not only the actual sequence of each new EST, but also explains how the ESTs were obtained, how to obtain the corresponding complete cDNA sequence and the corresponding genomic DNA sequence, how to make DNA constructs from the ESTs and corresponding sequences, how to use those sequences as reagents in molecular biology and other fields, how to produce gene products from the ESTs and corresponding sequences and antibodies to those gene products, and the functional categories of many ESTs and corresponding genes. Furthermore, numerous actual working examples and predictive

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examples are provided to demonstrate and exemplify numerous aspects of the invention.

#### I. ESTs from cDNA Libraries

5       The sequences of the present invention were isolated from commercially available and custom made cDNA libraries using a rapid screening and sequencing technique. In general, the method comprises applying conventional automated DNA sequencing technology to screening clones, advantageously  
10       randomly selected clones, from a cDNA library. Preferably, the library is initially "enriched" through removal of ribosomal sequences and other common sequences prior to clone selection. According to the present method, ESTs are generated from partial DNA sequencing of the selected clones.  
15       The ESTs of the present invention were generated using low redundancy of sequencing, typically a single sequencing reaction. While single sequencing reactions may have an accuracy as low as 97%, this nevertheless provides sufficient fidelity for identification of the sequence and design of PCR  
20       primers.

      Most human genes can be identified by EST sequencing from libraries of cDNA copies of messenger RNAs. However, some genes are expressed only at specific times during embryonic development, or only in small amounts in a few  
25       specific cell types. Other genes have mRNAs that are degraded very quickly by the cell in which they are expressed. If any of these are the case, transcripts of the gene will not be represented in cDNA libraries so the gene will not be identifiable by EST sequencing. A new method  
30       called "exon amplification", however, can be used to isolate and identify transcripts of such genes.

      Exon amplification works by artificially expressing part or all of a gene that is contained in a cloned fragment of genomic DNA such as a cosmid or yeast artificial chromosome  
35       (YAC). The gene is cloned into a special vector, designed at MIT, that uses control elements from virus genes to express



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the protein-coding exons of the human gene of interest. Exon trapping shows considerable promise as a general technique for identifying those genes in the human genome that cannot be found by cDNA cloning and EST sequencing. Exon amplification will also be useful for identifying the genes in regions of genomic DNA to which disease genes have been mapped. The exon amplification method can be used directly with the cosmid and YAC clones from human chromosomes that are being obtained by both NIH and DOE supported human genome centers. ESTs comprise DNA sequences corresponding to a portion of nuclear encoded messenger RNA. An EST is of sufficient length to permit: (1) amplification of the specific sequence from a cDNA library, e.g., by polymerase chain reaction (PCR); (2) use of a synthetic polynucleotide corresponding to a partial or complete sequence of the EST as a hybridization probe of a cDNA library, generally having 30 - 50 base pairs; or (3) unique designation of the pure cDNA clone from which the EST was derived (the EST clone) for use as a hybridization probe of a cDNA library. Preferably, EST-derived primer pairs and sequences amplify or detectably hybridize to a sequence from a genomic library.

It has been found that sufficient information is contained in the 150-400 base ESTs from one sequencing run to effect preliminary identification and exact chromosome mapping. Accordingly, the ESTs disclosed herein are generally at least 150 base pairs in length. The length of an EST is determined by the quality of sequencing data and the length of the cloned cDNA. Raw data from the automated sequencers is edited to remove low quality sequence at the end of the sequencing run. High quality sequences (usually a result of sequencing templates without excessive salt contamination) generally give about 400 bp of reliable sequence data; other sequences give fewer bases of reliable data. A 150 bp EST is long enough to be translated into a 50 amino acid peptide sequence. This length is sufficient to observe similarities when they exist in a database search. Furthermore, 150 bp is

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5 long enough to design PCR primers from each end of the sequence to amplify the complete EST. Sequences shorter than 150 bp are difficult to purify and use following PCR amplification. Furthermore, a 150 bp polynucleotide is likely to give a very strong signal with low background in a screen of a genomic library.

10 Finally, it is highly unlikely that a sequence of the same 150 bp exists in any genes in the genome besides the one tagged by the EST. Some closely related gene family members have very similar nucleotide sequences, but no examples of pairs of human genes with long segments of identical sequence have been reported to date. For instance, there are three known  $\beta$ -tubulin genes in humans. Several ESTs were found that matched one or another of these tubulin genes, but 15 several new members of this gene family were also found and could be clearly distinguished from the three known members. ESTs that match perfectly to several different genes can be detected by hybridizing to chromosomes: if many chromosomal loci are observed, the sequence (or a close variant) is present in more than one gene. This problem can be 20 circumvented by using the 3'-untranslated part of the cDNA alone as a probe for the chromosomal location or for the full-length cDNA or gene. The 3'-untranslated region is more likely to be unique within gene families, since there is no evolutionary pressure to conserve a coding function of this 25 region of the mRNA.

As demonstrated in the Examples that follow, ESTs can be used to map the expressed sequence to a particular chromosome. In addition, ESTs can be expanded to provide the 30 full coding regions, as detailed below. In this manner, previously unknown genes can be identified.

While a variety of cDNA libraries can be used to obtain ESTs, human brain cDNA libraries are exemplified and represent a preferred embodiment. Suitable cDNA libraries 35 can be freshly prepared or obtained commercially, e.g., as shown in Examples 1, 2, and 11. The cDNA libraries from the

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desired tissue are preferably preprocessed by conventional techniques to reduce repeated sequencing of high and intermediate abundance clones and to maximize the chances of finding rare messages from specific cell populations. Preferably, preprocessing includes the use of defined composition prescreening probes, e.g., cDNA corresponding to mitochondria, abundant sequences, ribosomes, actins, myelin basic polypeptides, or any other known high abundance peptide; these prescreening probes used for preprocessing are generally derived from known ESTs. Other useful preprocessing techniques include subtraction, which preferentially reduces the population of certain sequences in the library (e.g., see A. Swaroop et al., *Nucl. Acids Res.* 19, 1954 (1991)), and normalization, which results in all sequences being represented in approximately equal proportions in the library (Patanjali et al, *Proc. Natl. Acad. Sci. USA* 88:1943 (1991)).

The cDNA libraries used in the present method will ideally use directional cloning methods so that either the 5' end of the cDNA (likely to contain coding sequence) or the 3' end (likely to be a non-coding sequence) can be selectively obtained."

Libraries of cDNA can also be generated from recombinant expression of genomic DNA. After they are amplified, ESTs can be obtained and sequenced, e.g., as illustrated in Example 11.

The sequences of the present invention include the specific sequences set forth in the Sequence Listing and designated SEQ ID NO: 1 - SEQ ID NO: 2412. In one aspect of this embodiment, the invention relates to those sequences of SEQ ID NOS: 1 - 2412 that comprise the cDNA coding sequences for polypeptides having less than 95% identity with known amino acid sequences (see Table 2) and more preferably less than 90% or 85% identity. In a second aspect, the invention relates to those sequences of SEQ ID NOS: 1 - 2412 that encode polypeptides having no similarity to known amino acid

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sequences (see Examples that follow). Precisely because they do not contain coding regions and are therefore more unique in their sequence structures, those sequences which meet neither of the preceding criteria can be most useful and are generally preferred for mapping.

Consistent with the NIH mission and its responsibilities to disseminate knowledge and share the tangible fruits of its research, the present inventors have taken a number of steps to facilitate sequence data and clone availability. All EST sequences have been submitted to GenBank (representing an addition equivalent to 7% of the human nucleotides in Release 69 of GenBank, September 1991). The corresponding cDNA clones have been submitted to the American Type Culture Collection and information on clones and sequences has been submitted to the Genome Data Base (Pearson, P. Nucl. Acids Res. 19 (Suppl.): 2237-9 (1991)).

## II. Complete Coding Sequences from ESTs

The ESTs of the present invention generally represent relatively small coding regions or untranslated regions of human genes. Although most of these sequences do not code for a complete gene product, the ESTs of the present invention are highly specific markers for the corresponding complete coding regions. The ESTs are of sufficient length that they will hybridize, under stringent conditions, only with DNA for that gene to which they correspond. Suitably stringent conditions comprise conditions, for example, where at least 95%, preferably at least 97% or 98% identity (base pairing), is required for hybridization. This property permits use of the EST to isolate the entire coding region and even the entire sequence. Therefore, only routine laboratory work is necessary to parlay the unique EST sequence into the corresponding unique complete gene sequence.

Thus, each of the ESTs of the present invention "corresponds" to a particular unique human gene. Knowledge

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of the EST sequence permits routine isolation and sequencing of the complete coding sequence of the corresponding gene. The complete coding sequence is present in a full-length cDNA clone as well as in the gene carried on genomic clones. Therefore, each EST "corresponds" to a cDNA (from which the EST was derived), a complete genomic gene sequence, a polypeptide coding region (which can be obtained either from the cDNA or genomic DNA), and a polypeptide or amino acid sequence encoded by that region.

The first step in determining where an EST is located in the cDNA is to analyze the EST for the presence of coding sequence, e.g., as described in Example 14. The CRM program predicts the extent and orientation of the coding region of a sequence. Based on this information, one can infer the presence of start or stop codons within a sequence and whether the sequence is completely coding or completely non-coding. If start or stop codons are present, then the EST can cover both part of the 5'-untranslated or 3'-untranslated part of the mRNA (respectively) as well as part of the coding sequence. If no coding sequence is present, it is likely that the EST is derived from the 3'-untranslated sequence due to its longer length and the fact that most cDNA library construction methods are biased toward the 3' end of the mRNA.

One general procedure for obtaining complete sequences from ESTs is as follows:

1. Purify selected human DNA from an EST clone (the cDNA clone that was sequenced to give the EST), e.g., by endonuclease digestion using ECOR1, gel electrophoresis, and isolation of the aforementioned clone by removal from low-melting agarose gel.

2. Radiolabel the isolated insert DNA, e.g., with <sup>32</sup>P labels, preferably by nick translation or random primer labeling.

3. Use the labeled EST insert as a probe to screen a lambda phage cDNA library or a plasmid cDNA library.

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4. Identify colonies containing clones related to the probe cDNA and purify them by known purification methods.

5. Nucleotide sequence the ends of the newly purified clones to identify full length sequences.

5 6. Perform complete sequencing of full length clones by Exonuclease III digestion or primer walking. Northern blots of the mRNA from various tissues using at least part of the EST clone as a probe can optionally be performed to check the size of the mRNA against that of the purported full  
10 length cDNA.

An EST is a specific tag for a messenger RNA molecule. The complete sequence of that messenger RNA, in the form of cDNA, can be determined using the EST as a probe to identify a cDNA clone corresponding to a full-length transcript,  
15 followed by sequencing of that clone. The EST or the full-length cDNA clone can also be used as a probe to identify a genomic clone or clones that contain the complete gene including regulatory and promoter regions, exons, and introns.

20 ESTs are used as probes to identify the cDNA clones from which an EST was derived. ESTs, or portions thereof, can be nick-translated or end-labelled with  $P^{32}$  using polynucleotide kinase using labelling methods known to those with skill in the art. (Basic Methods in Molecular Biology, L.G. Davis, M.D. Dibner, and J.F. Battey, ed., Elsevier Press, NY, 1986). The  
25 lambda library can be directly screened with the labelled ESTs of interest or the library can be converted en masse to pBluescript (Stratagene, La Jolla, California) to facilitate bacterial colony screening. Both methods are well known in the art. Briefly, filters with bacterial colonies containing  
30 the library in pBluescript or bacterial lawns containing lambda plaques are denatured and the DNA is fixed to the filters. The filters are hybridized with the labelled probe using hybridization conditions described by Davis et al. The  
35 ESTs, cloned into lambda or pBluescript, can be used as positive controls to assess background binding and to adjust

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the hybridization and washing stringencies necessary for accurate clone identification. The resulting autoradiograms are compared to duplicate plates of colonies or plaques; each exposed spot corresponds to a positive colony or plaque. The colonies or plaques are selected, expanded and the DNA is isolated from the colonies for further analysis and sequencing.

The ESTs can additionally be used to screen Northern blots of mRNA obtained from various tissues or cell cultures, including the tissue of origin of the EST clone. Northern analysis will most often produce one to several positive bands. The bands can be selected for further study based on the predicted size of the mRNA.

Positive cDNA clones in phage lambda are analyzed to determine the amount of additional sequence they contain using PCR with one primer from the EST and the other primer from the vector. Clones with a larger vector-insert PCR product than the original EST clone are analyzed by restriction digestion and DNA sequencing to determine whether they contain an insert of the same size or similar as the mRNA size on a Northern blot.

Once one or more overlapping cDNA clones are identified, the complete sequence of the clones can be determined. The preferred method is to use exonuclease III digestion (McCombie, W.R, Kirkness, E., Fleming, J.T., Kerlavage, A.R., Iovannisci, D.M., and Martin-Gallardo, R., *Methods*: 3: 33-40, 1991). A series of deletion clones is generated, each of which is sequenced. The resulting overlapping sequences are assembled into a single contiguous sequence of high redundancy (usually three to five overlapping sequences at each nucleotide position), resulting in a highly accurate final sequence.

A similar screening and clone selection approach can be applied to obtaining cosmid or lambda clones from a genomic DNA library that contains the complete gene from which the EST was derived (Kirkness, E.F., Kusiak, J.W., Menninger, J.,

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Gocayne, J.D., Ward, D.C., and Venter, J.C. *Genomics* 10: 985-995 (1991). Although the process is much more laborious, these genomic clones can be sequenced in their entirety also. A shotgun approach is preferred to sequencing clones with inserts longer than 10 kb (genomic cosmid and lambda clones). In shotgun sequencing, the clone is randomly broken into many small pieces, each of which is partially sequenced. The sequence fragments are then aligned to produce the final contiguous sequence with high redundancy. An intermediate approach is to sequence just the promoter region and the intron-exon boundaries and to estimate the size of the introns by restriction endonuclease digestion (ibid.).

Using the sequence information provided herein, the polynucleotides of the present invention can be derived from natural sources or synthesized using known methods. The sequences falling within the scope of the present invention are not limited to the specific sequences described, but include human allelic and species variations thereof and portions thereof of at least 15-18 bases. (Sequences of at least 15-18 bases can be used, for example, as PCR primers or as DNA probes.) In addition, the invention includes the entire coding sequence associated with the specific polynucleotide sequence of bases described in the Sequence Listing, as well as portions of the entire coding sequence of at least 15-18 bases and allelic and species variations thereof. Furthermore, to accommodate codon variability, the invention includes sequences coding for the same amino acid sequences as do the specific sequences disclosed herein. Finally, although the error rate in the automated sequencing used in the present invention is small, there remains some chance of error. Therefore, claims to particular sequences should not be so narrowly construed as to require inclusion of erroneously identified bases or to exclude corrections.

Any specific sequence disclosed herein can be readily screened for errors by resequencing each EST in both directions (i.e., sequence both strands of cDNA).



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The sequences, constructs, vectors, clones, and other materials comprising the present invention can advantageously be in enriched or isolated form. As used herein, "enriched" means that the concentration of the material is at least  
5 about 2, 5, 10, 100, or 1000 times its natural concentration (for example), advantageously 0.01%, by weight, preferably at least about 0.1% by weight. Enriched preparations of about  
10 "housekeeping" genes and clones without human cDNA inserts results in a library that is "enriched" in the desired clones.

The term "isolated" requires that the material be removed from its original environment (e.g., the natural  
15 environment if it is naturally occurring). For example, a naturally-occurring polynucleotide present in a living animal is not isolated, but the same polynucleotide, separated from some or all of the coexisting materials in the natural system, is isolated.

20 It is also advantageous that the sequences be in purified form. The term "purified" does not require absolute purity; rather, it is intended as a relative definition. Individual EST clones isolated from a cDNA library have been conventionally purified to electrophoretic homogeneity. The  
25 sequences obtained from these clones could not be obtained directly either from the library or from total human DNA. The cDNA clones are not naturally occurring as such, but rather are obtained via manipulation of a partially purified naturally occurring substance (messenger RNA). The  
30 conversion of mRNA into a cDNA library involves the creation of a synthetic substance (cDNA) and pure individual cDNA clones can be isolated from the synthetic library by clonal selection. Thus, creating a cDNA library from messenger RNA and subsequently isolating individual clones from that  
35 library results in an approximately  $10^6$ -fold purification of the native message. Purification of starting material or

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natural material to at least one order of magnitude, preferably two or three orders, and more preferably four or five orders of magnitude is expressly contemplated.

5 In a cDNA library there are many species of mRNA represented. Each cDNA clone can be interesting in its own right, but must be isolated from the library before further experimentation can be completed. In order to sequence any specific cDNA, it must be removed and separated (i.e. isolated and purified) from all the other sequences. This  
10 can be accomplished by many techniques known to those of skill in the art. These procedures normally involve identification of a bacterial colony containing the cDNA of interest and further amplification of that bacteria. Once a cDNA is separated from the mixed clone library, it can be  
15 used as a template for further procedures such as nucleotide sequencing.

Although claims to large numbers of ESTs and corresponding sequences are presented herein, the invention is not limited to these particular groupings of sequences.  
20 Thus, individual sequences are considered as applicants' discoveries or inventions, as are subgroupings of sequences. All of the functional subgroupings set forth in the tables define groupings for which separate claims are contemplated as being within the scope of this invention. Moreover, in  
25 addition to claims to individual clones, it is intended that the present disclosure also support claims to numerical subgroupings. Thus, subgroupings of 50 ESTs (and corresponding sequences) are contemplated (e.g., SEQ ID NOS 1-50, 51-100, 101-150, etc.) as being within the scope of  
30 this invention, as are subgroupings of 5, 10, 25, 100, 200, and 500 ESTs and corresponding sequences.

### III. DNA Constructs

35 The present invention also includes recombinant constructs comprising one or more of the sequences as broadly described above. The constructs comprise a vector, such as

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a plasmid or viral vector, into which a sequence of the invention has been inserted, in a sense or antisense orientation. In a preferred aspect of this embodiment, the construct further comprises regulatory sequences, including for example, a promoter, operably linked to the sequence. Large numbers of suitable vectors and promoters are known to those of skill in the art, and are commercially available. The following vectors are provided by way of example.

5     **Bacterial:** pBs, phagescript,  $\phi$ X174, pBluescript SK, pBs KS, pNH8a, pNH16a, pNH18a, pNH46a (Stratagene); pTrc99A, pKK223-3, pKK233-3, pDR540, pRIT5 (Pharmacia).

10     **Eukaryotic:** pWLneo, pSV2cat, pOG44, pXT1, pSG (Stratagene); pSVK3, pBPV, pMSG, pSVL (Pharmacia).

Promoter regions can be selected from any desired gene using CAT (chloramphenicol transferase) vectors or other vectors with selectable markers. Two appropriate vectors are pKK232-8 and pCM7. Particular named bacterial promoters include lacI, lacZ, T3, T7, gpt, lambda P<sub>R</sub>, and trc. Eukaryotic promoters include CMV immediate early, HSV thymidine kinase, early and late SV40, LTRs from retrovirus, and mouse metallothionein-I. Selection of the appropriate vector and promoter is well within the level of ordinary skill in the art.

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In a further embodiment, the present invention relates to host cells containing the above-described construct. The host cell can be a higher eukaryotic cell, such as a mammalian cell, or a lower eukaryotic cell, such as a yeast cell, or the host cell can be a procaryotic cell, such as a bacterial cell. Introduction of the construct into the host cell can be effected by calcium phosphate transfection, DEAE dextran mediated transfection, or electroporation (Davis, L., Dibner, M., Battey, I., **Basic Methods in Molecular Biology**, (1986)).

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The constructs in host cells can be used in a conventional manner to produce the gene product coded by the recombinant sequence. Alternatively, the encoded polypeptide

35     The constructs in host cells can be used in a conventional manner to produce the gene product coded by the recombinant sequence. Alternatively, the encoded polypeptide

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can be synthetically produced by conventional peptide synthesizers.

Certain ESTs have already been preliminarily categorized by analogy to related sequences in other organisms (see Table 2). Table 10 of Example 10 categorizes particular ESTs broadly as metabolic, regulatory, and structural sequences where known. Constructs comprising genes or coding sequences corresponding to each of these categories are, therefore, specifically and individually contemplated.

Table 11 more particularly separates 127 new ESTs into 13 categories using a different criteria. These are genes related to cell surface; developmental control; energy metabolism; kinase and phosphatase; oncogenes; other metabolism-related polypeptides; peptidases and peptidase inhibitors; receptors; structural and cytoskeletal; signal transduction; transporters; transcription, translation, and subcellular localization; and transcription factors. Table 11 further identifies the EST by the particular gene product for which it apparently codes. Each of these categories individually comprises a preferred category of EST, and preferred constructs and resulting polypeptide can be prepared from those ESTs or the corresponding complete gene sequence.

#### IV. ESTs and Corresponding Sequences as Reagents

Each of the cDNA sequences identified herein (and the corresponding complete gene sequences) can be used in numerous ways as polynucleotide reagents. The sequences can be used as diagnostic probes for the presence of a specific mRNA in a particular cell type. In addition, these sequences can be used as diagnostic probes suitable for use in genetic linkage analysis (polymorphisms). Further, the sequences can be used as probes for locating gene regions associated with genetic disease, as explained in more detail below.

The EST and complete gene sequences of the present invention are also valuable for chromosome identification.

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Each sequence is specifically targeted to and can hybridize with a particular location on an individual human chromosome. Moreover, there is a current need for identifying particular sites on the chromosome. Few chromosome marking reagents based on actual sequence data (repeat polymorphisms) are presently available for marking chromosomal location. The present invention constitutes a major expansion of available chromosome markers. One hundred ESTs have already been mapped to chromosomes. Using the techniques described in Example 5 or 6, the remaining ESTs and the corresponding complete sequences can similarly be mapped to chromosomes. The mapping of ESTs and cDNAs to chromosomes according to the present invention is an important first step in correlating those sequences with genes associated with disease.

Briefly, sequences can be mapped to chromosomes by preparing PCR primers (preferably 15-25 bp) from the ESTs. Computer analysis of the ESTs is used to rapidly select primers that do not span more than one exon in the genomic DNA, thus complicating the amplification process. These primers are then used for PCR screening of somatic cell hybrids containing individual human chromosomes. Only those hybrids containing the human gene corresponding to the EST will yield an amplified fragment.

PCR mapping of somatic cell hybrids is a rapid procedure for assigning a particular EST to a particular chromosome. Three or more clones can be assigned per day using a single thermal cycler. Using the present invention with the same oligonucleotide primers, sublocalization can be achieved with panels of fragments from specific chromosomes or pools of large genomic clones in an analogous manner. Other mapping strategies that can similarly be used to map an EST to its chromosome include in situ hybridization, prescreening with labeled flow-sorted chromosomes and preselection by hybridization to construct chromosome specific cDNA libraries. Results of mapping ESTs to chromosomal segments are listed in Tables 3 and 4.

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Fluorescence in situ hybridization (FISH) of a cDNA clone to a metaphase chromosomal spread can be used to provide a precise chromosomal location in one step. This technique can be used with cDNA as short as 500 or 600 bases; however, clones larger than 2,000 bp have a higher likelihood of binding to a unique chromosomal location with sufficient signal intensity for simple detection. FISH requires use of the clone from which the EST was derived, and the longer the better. 2,000 bp is good, 4,000 is better, and more than 4,000 is probably not necessary to get good results a reasonable percentage of the time. For a review of this technique, see Verma et al., **Human Chromosomes: a Manual of Basic Techniques**. Pergamon Press, New York (1988).

Reagents for chromosome mapping can be used individually (to mark a single chromosome or a single site on that chromosome) or as panels of reagents (for marking multiple sites and/or multiple chromosomes). Reagents corresponding to noncoding regions of the genes actually are preferred for mapping purposes. Coding sequences are more likely to be conserved within gene families, thus increasing the chance of cross hybridizations during chromosomal mapping (see Tables 8 and 9).

Once a sequence has been mapped to a precise chromosomal location, the physical position of the sequence on the chromosome can be correlated with genetic map data. (Such data are found, for example, in V. McKusick, **Mendelian Inheritance in Man** (available on line through Johns Hopkins University Welch Medical Library).) The relationship between genes and diseases that have been mapped to the same chromosomal region are then identified through linkage analysis (coinheritance of physically adjacent genes).

Next, it is necessary to determine the differences in the cDNA or genomic sequence between affected and unaffected individuals. If a mutation is observed in some or all of the affected individuals but not in any normal individuals, then

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the mutation is likely to be the causative agent of the disease.

With current resolution of physical mapping and genetic mapping techniques, a cDNA precisely localized to a chromosomal region associated with the disease could be one of between 50 and 500 potential causative genes. (This assumes 1 megabase mapping resolution and one gene per 20 kb.)

Comparison of affected and unaffected individuals generally involves first looking for structural alterations in the chromosomes, such as deletions or translocations that are visible from chromosome spreads or detectable using PCR based on that cDNA sequence. Ultimately, complete sequencing of genes from several individuals is required to confirm the presence of a mutation and to distinguish mutations from polymorphisms.

In addition to the foregoing, the sequences of the invention, as broadly described, can be used to control gene expression through triple helix formation or antisense DNA or RNA, both of which methods are based on binding of a polynucleotide sequence to DNA or RNA. Polynucleotides suitable for use in these methods are usually 20 to 40 bases in length and are designed to be complementary to a region of the gene involved in transcription (triple helix - see Lee et al, Nucl. Acids Res. 6: 3073 (1979); Cooney et al, Science 241: 456 (1988); and Dervan et al, Science 251: 1360 (1991)) or to the mRNA itself (antisense - Okano, J. Neurochem. 56: 560 (1991); Oligodeoxynucleotides as Antisense Inhibitors of Gene Expression, CRC Press, Boca Raton, FL (1988)). Triple helix formation optimally results in a shut-off of RNA transcription from DNA, while antisense RNA hybridization blocks translation of an mRNA molecule into polypeptide. Both techniques have been demonstrated to be efficient in model systems. Information contained in the sequences of the present invention is necessary for the design of an antisense or triple helix oligonucleotide.

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The present invention is also useful tool in gene therapy, which requires isolation of the disease-associated gene in question as a prerequisite to the insertion of a normal gene into an organism to correct a genetic defect. ■  
5 high specificity of the cDNA probes according to this invention have promise of targeting such gene locations in a highly accurate manner.

The sequences of the present invention, as broadly defined, are also useful for identification of individuals  
10 from minute biological samples. The United States military, for example, is considering the use of restriction fragment length polymorphism (RFLP) for identification of its personnel. In this technique, an individual's genomic DNA is digested with one or more restriction enzymes, and probed on  
15 a Southern blot to yield unique bands for identifying personnel. This method does not suffer from the current limitations of "Dog Tags" which can be lost, switched, or stolen, making positive identification difficult. The sequences of the present invention are useful as additional  
20 DNA markers for RFLP.

However, RFLP is a pattern based technique, which does not directly focus on the actual DNA sequence of the individual. The sequences of the present invention can be used to provide an alternative technique that determines the  
25 actual base-by-base DNA sequence of selected portions of an individual's genome. These sequences can be used to prepare PCR primers for amplifying and isolating such selected DNA. One can, for example, take an EST of the invention and prepare two PCR primers from the 5' and 3' ends of the EST.  
30 These are used to amplify an individual's DNA, corresponding to the EST. The amplified DNA is sequenced.

Panels of corresponding DNA sequences from individuals, made this way, can provide unique individual identifications, as each individual will have a unique set of such DNA  
35 sequences, due to allelic differences. The sequences of the present invention can be used to particular advantage to



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obtain such identification sequences from individuals and from tissue, as explained in Examples 12 - 14.

5 The EST sequences from Examples 1 and 2 and the complete sequences from Example 13 uniquely represent portions of the human genome. Allelic variation occurs to some degree in the coding regions of these sequences, and to a greater degree in the noncoding regions. It is estimated that allelic variation between individual humans occurs with a frequency of about once per each 500 bases. Each of the ESTs or complete coding sequences comprising a part of the present invention can, to some degree, be used as a standard against which DNA from an individual can be compared for identification purposes. Because greater numbers of polymorphisms occur in the noncoding regions, fewer sequences are necessary to differentiate individuals. The noncoding sequences of Table 9 for example, could comfortably provide positive individual identification with a panel of perhaps 100 to 1,000 primers which each yield a noncoding amplified sequence of 100 bp. If predicted coding sequences, such as those from Table 6, are used, a more appropriate number of primers for positive individual identification would be 500-2,000.

20 If a panel of reagents from ESTs or complete sequences of this invention is used to generate a unique ID database for an individual, those same reagents can later be used to identify tissue from that individual. Positive identification of that individual, living or dead can be made from extremely small tissue samples.

30 Another use for DNA-based identification techniques is in forensic biology. PCR technology can be used to amplify DNA sequences taken from very small biological samples such as tissues, e.g., hair or skin, or body fluids, e.g., blood, saliva, semen, etc. In one prior art technique, gene sequences are amplified at specific loci known to contain a large number of allelic variations, for example the DQ $\alpha$  class II HLA gene (Erlich, H., PCR Technology, Freeman and Co.

(1992)). Once this specific area of the genome is amplified, it is digested with one or more restriction enzymes to yield an identifying set of bands on a Southern blot probed with DNA corresponding to the DQ $\alpha$  class II HLA gene.

5       The sequences of the present invention can be used to provide polynucleotide reagents specifically targeted to additional loci in the human genome, and can enhance the reliability of DNA-based forensic identifications. Those sequences targeted to noncoding regions (see, e.g., Tables 8  
10       and 9) are particularly appropriate. As mentioned above, actual base sequence information can be used for identification as an accurate alternative to patterns formed by restriction enzyme generated fragments. Reagents for obtaining such sequence information are within the scope of  
15       the present invention. Such reagents can comprise complete ESTs or corresponding coding regions, or fragments of either of at least 15 bp, preferably at least 18 bp.

      There is also a need for reagents capable of identifying the source of a particular tissue. Such need arises, for  
20       example, in forensics when presented with tissue of unknown origin. Appropriate reagents can comprise, for example, DNA probes or primers specific to particular tissue prepared from the ESTs or complete sequences of the present invention. Panels of such reagents can identify tissue by species and/or  
25       by organ type. In a similar fashion, these reagents can be used to screen tissue culture for contamination.

#### V. Production of Polypeptide Corresponding to ESTs

      As previously explained, each EST corresponds not only  
30       to a coding region, but also to a polypeptide. Once the coding sequence is known, or the gene is cloned which encodes the polypeptide, conventional techniques in molecular biology can be used to obtain the polypeptide.

      At the simplest level, the amino acid sequence encoded  
35       by the polynucleotide sequence can be synthesized using commercially available peptide synthesizers. This is

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particularly useful in producing small peptides and fragments of larger polypeptides. (Fragments are useful, for example, in generating antibodies against the native polypeptide.)

5 Alternatively, the DNA encoding the desired polypeptide can be inserted into a host organism and expressed. The organism can be a bacterium, yeast, cell line, or multicellular plant or animal. The literature is replete with examples of suitable host organisms and expression techniques. For example, naked polynucleotide (DNA or mRNA)  
10 can be injected directly into muscle tissue of mammals, where it is expressed. This methodology can be used to deliver the polypeptide to the animal, or to generate an immune response against a foreign polypeptide. Wolff, et al., *Science* 247:1465 (1990); Felgner, et al., *Nature* 349:351 (1991).  
15 Alternatively, the coding sequence, together with appropriate regulatory regions (i.e., a construct), can be inserted into a vector, which is then used to transfect a cell. The cell (which may or may not be part of a larger organism) then expresses the polypeptide. (See Example 25.)

20 Antibodies generated against the polypeptide corresponding to a sequence of the present invention can be obtained by direct injection of the naked polypeptide into an animal (as above) or by administering the polypeptide to an animal, preferably a nonhuman. The antibody so obtained will  
25 then bind the polypeptide itself. In this manner, even a sequence encoding only a fragment of the polypeptide can be used to generate antibodies binding the whole native polypeptide. Such antibodies can then be used to isolate the polypeptide from tissue expressing that polypeptide.  
30 Moreover, a panel of such antibodies, specific to a large number of polypeptides, can be used to identify and differentiate such tissue.

#### VI. Examples

35 Certain aspects of the present invention are described in greater detail in the non-limiting Examples that follow.

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## EXAMPLE 1

cDNA Sequences D terminated by Random  
Clone Selection: First set

5

## METHODOLOGY:

With reference to the data presented in Table 1, lambda ZAP libraries were converted en masse to pBluescript plasmids, transfected into E. coli XL1-Blue cells, and plated on X-gal/IPTG/ampicillin plates. A total of 1058 clones were picked at random from three human brain cDNA libraries: fetal brain, two-year-old hippocampus, and two-year-old temporal cortex (Stratagene catalog #936206, 936205, 935, respectively. Stratagene, 11099 N. Torrey Pines Rd., La Jolla, CA 92037). An analysis of these clones is summarized in Table I (see below) In addition, clones selected from the hippocampus library were also analyzed after subtractive hybridization with the fibroblast library. These results are listed in the "Hippocampus Subtracted" column of Table 1.

Templates for DNA sequencing were PCR products or plasmids prepared by the alkaline lysis method. About half of the templates prepared by PCR failed to yield an amplified fragment suitable for sequencing. This was primarily due to use of PCR conditions that minimized the need for further purification of the product but also selected against amplification of long inserts (5  $\mu$ l fresh or frozen overnight culture of E. coli carrying the pBluescript plasmid, 7.5  $\mu$ M each dNTP, and 0.1  $\mu$ M each primer for 35 cycles: 94°C, 40 sec; 55°C, 40 sec; 72°C, 90 sec). A further percentage of the PCR-generated templates failed to sequence, largely due to primer-dimer or other amplification artifacts. Qiagen™ columns improved the percentage of plasmid templates, increasing the yields of usable sequence from about 60% with a standard alkaline lysis protocol to over 90%. Overall, 117 PCR-generated templates and 497 plasmid templates resulted in usable sequence. Dideoxy chain termination sequencing reactions were performed with fluorescent dye-labeled M13

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universal or reverse primers. After a cycle sequencing protocol, carried out in a Perkin-Elmer thermal cycler, sequencing reactions were run on an Applied Biosystems, Inc. (Foster City, CA) 373A automated DNA sequencer. (Cycle sequencing was performed in a Perkin Elmer Thermal Cycler for 15 cycles of 95°C, 30 sec; 60°C, 1 sec; 70°C, 60 sec and 15 cycles of 95°C, 30 sec; 70°C, 60 sec with the Applied Biosystems, Inc. Taq Dye Primer Cycle Sequencing Core Kit protocol). Some sequencing reactions were performed on an ABI robotic workstation (Cathcart, *Nature* 347: 310 (1990) hereby incorporated by reference).

#### RESULTS:

Singe-run DNA sequence data were obtained from 609 randomly chosen cDNA clones. The number of clones sequenced from each library is summarized in Table 1. Double-stranded cDNA clones in the pBluescript vector were sequenced by a cycle sequencing protocol with dye-labeled primers and Applied Biosystems, Inc. 373A DNA Sequences. The average length of usable sequence was 397 bases with a standard deviation of 99 bases.

Subtractive hybridization has been used successfully to reduce the population of highly represented sequences in a cDNA library by selectively removing sequences shared by another library. (Schmid and Girou, *Neurochem.* 48: 307 (1987); Fargnoli et al, *Anal. Biochem.* 187: 364 (1990); Duguid and Dinauer, *Nucl. Acids. Res.* 18: 2789 (1990); Schweinfest, et al, *Genet. Anal. Techn. Appl.* 7: 64 (1990); Travis and Sutcliffe, *Proc. Natl. Acad. Sci. USA* 85: 1696 (1988); Kato, *Eur. J. Neurosci.* 2: 704 (1990)). Subtractive hybridization was therefore tested as a way of enhancing the number of brain-specific clones in the hippocampus library by hybridizing the hippocampus library with a WI38 human lung fibroblast cell line cDNA library and removing the common sequences (Schweinfest et al, *Genet. Anal. Techn. Appl.* 7: 64 (1990); Sive and St. John, *Nucl. Acids Res.* 16: 10937

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(1988)). Clones from this subtraction are listed in the column "Hippocampus Subtracted" in Table 1.

The EST sequences from this Example 1 are identified as SEQ ID NOS 1-315.

TABLE 1. cDNA Library Composition Determined  
By Random Clone Sequencing

-----cDNA Library-----

| EST Category               | Hippocampus |         | Hippocampus Subtracted |         | Fetal Brain |         | Temporal Cortex |         |
|----------------------------|-------------|---------|------------------------|---------|-------------|---------|-----------------|---------|
|                            | Number      | Percent | Number                 | Percent | Number      | Percent | Number          | Percent |
| Databases Match--Human     | 48          | 12.8    | 10                     | 8.6     | 3           | 7.9     | 6               | 7.5     |
| Mitochondrial Genes        | 39          | 10.4    | 14                     | 12.2    | 6           | 15.8    | 0               | 0       |
| Repeats: Alu, Line-1, etc. | 10          | 2.7     | 7                      | 6.0     | 0           | 0       | 11              | 13.8    |
| Ribosomal RNA              | 32          | 8.6     | 7                      | 6.0     | 4           | 10.5    | 0               | 0       |
| Other Nuclear Genes        | 32          | 8.6     | 7                      | 6.0     | 5           | 13.2    | 4               | 5.0     |
| Database Match--Other      | 160         | 42.8    | 44                     | 37.9    | 20          | 52.6    | 6               | 7.5     |
| No Database Match          | 53          | 14.1    | 24                     | 20.7    | 0           | 0       | 27              | 33.7    |
| poly A Insert              | 1           | 0.3     | 3                      | 2.6     | 0           | 0       | 26              | 32.5    |
| No Insert                  |             |         |                        |         |             |         |                 |         |

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## EXAMPLE 2

Sequencing of Additional ESTs: Second set

Over 2600 additional cDNA clones have been isolated, partially sequenced and screened. The clones were isolated from four human brain cDNA libraries. The new sequences thus discovered, together with the 315 brain ESTs from Example 1, correspond to over 2400 new human genes. These data represent an approximate doubling of the number of human genes identified by DNA sequencing.

Specifically, four cDNA libraries were used as sources of clones for sequencing. Human hippocampus and fetal brain libraries, plasmid template preparation, sequencing reactions, and automated sequencing were performed as described (Adams, M.D., Kelley, J.M., Gocayne, J.D., Dubnick, M., Polymeropoulos, M.H., Xiao, H., Merril, C.R., Wu, A., Olde, B., Moreno, R.F., Kerlavage, A.R., McCombie, W.R., & Venter, J.C. *Science*, 252: 1651-56 (1991)). A pooled probe consisting of inserts from 10 different EST clones with sequences that matched either mitochondrial genes or the 18S or 28S ribosomal RNAs was used to prescreen a gridded filter array of the hippocampus library; nonhybridizing clones are referred to as the "prescreened library". Another fetal brain library was constructed by and was a gift from Bento Soares (Columbia University). A directionally-cloned library was prepared using the method of Rubenstein, et al. (Rubenstein, J., Elizabeth, A., Brice, A., Ciaranello, R., Denney, D., Porteus, M. & Usdin, T. *Nucl. Acids Res.* 18: 4833-4842) using human adult brain mRNA purchased from Clontech (Palo Alto, CA; Catalogue # 6516-1). Of 482 clones analyzed by restriction enzyme digestion, 33% contained inserts at least 1500 base pairs in length. Stratagene hippocampus and fetal brain library totals include data from Adams et al *Science* 252: 1651.

Sequences of nuclear-encoded cDNAs that did not include interspersed repeats (Schmid, C. W. & Jelinek, W. R. *Science*



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216: 1065-1070 (1982); Paulson, K. E., Deka, N., Schmid, C. W., Misra, R., Schlinder, C. W., Rush, M. G., Kadyk, L., & Leinwand, L. *Nature* 316: 359-361 (1985); Fanning, T. G. & Singer, M. F. *Biochem. Biophys. Acta* 910: 203-212 (1987))

5 were searched against all of GenBank and, in 6-frame translation, against a comprehensive, non-redundant peptide database using the network BLAST (Altschul, S. F., Gish, W., Miller, W., Myers, E.W., & Lipman, D. J. *Mol. Biol.* 215: 403-410 (1990)) server at the National Center for

10 Biotechnology Information. BLAST output was parsed, and an interactive alignment editor was used to select which matches, if any, from each search to record in a relational EST database, which was developed to track sequencing, identification, tissue localization, physical mapping, and

15 the public distribution of the clones, mapping and sequence data. For significant similarities, a putative gene name and Protein Identification Resource (PIR) gene family identification (Barker, W., George, D., Hunt, L., & Garavelli, J. *Nucl. Acids Res.* 19 (Suppl): 2231-2236 (1991))

20 for the EST were assigned. ESTs without significant matches using BLAST were searched in translation against PIR using FASTA. Ten additional marginal matches were found. A total of 2300 new EST sequences comprising 765,505 nucleotides from the current data set have been submitted to GenBank and

25 assigned accession numbers M77851-M79278 and M85308-M86179. All ESTs except those multiply representing actin, tubulin, and myelin basic protein clones were submitted. ATCC accession numbers of cDNA clones from which ESTs were derived are 77501-78999 and 81000-81756. The Genome Data Base

30 expressed D-segment numbers for these clones are D0S1E - D0S2422E. The ESTs from this Example are identified herein as SEQ ID NOS 316-2407.

## EXAMPLE 3

EST Characterization: First Set

ESTs including SEQ ID NOs 1-315 were analyzed as follows. Initially, the EST sequences were examined for similarities in the GenBank nucleic acid database (GenBank Release 65.0), Protein Information Resource Release 26.0 (PIR), and ProSite (MacPattern from the EMBL data library, Fuchs R. *Comput. Appl. Biosci.* 7: 105 (1990) Release 5.0 were used). BLAST was used to search Genbank and the PIR (both maintained by the National Center for Biotechnology Information) ESTs without exact GenBank matches were translated in all six reading frames and each translation was compared with the protein sequence database PIR and the ProSite protein motif database. Comparisons with the ProSite motif database were done by means of the program MacPattern from the EMBL Data Library. GenBank and PIR searches were conducted with the "basic local alignment search tool" programs for nucleotide (BLASTN) and peptide (BLASTX) comparisons (Altschul et al, *J. Mol. Biol.* 215: 403 (1990)). PIR searches were run on the National Center for Biotechnology Information BLAST network service. The BLAST programs contain a very rapid database-searching algorithm that searches for local areas of similarity between two sequences and then extends the alignments on the basis of defined match and mismatch criteria. The algorithm does not consider the potential gaps to improve the alignment, thus sacrificing some sensitivity for a 6-80 fold increase in speed over other database-searching programs such as FASTA (Pegarson and Lipman, *Proc. Natl. Acad. Sci. USA*, 85: 2444 (1988)).

Sequence similarities identified by the BLAST programs were considered statistically significant with a Poisson P-value than 0.01. The Poisson P-value less than the probability of as high a score occurring by chance given the number of residues in the query sequence and the database.

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After the BLASTN search, 30 unmatched ESTs were compared against GenBank by FASTA to determine if significant matches were missed due to the use of BLASTN for the database search. No additional statistically significant matches were found. Statistical significance does not necessarily mean functional similarity; some of the reported matches may indicate the presence of a conserved domain or motif or simply a common protein structure pattern. Those ESTs identified as fully corresponding to known human genes or proteins are not included in this disclosure. Statistically significant matches are reported in Table 2, together with the length and percent identity or similarity of each alignment.

On the basis of database searches, 609 EST sequences were classified into eight groups as shown in Table 1 (see Example 1 above). Four groups, with 197 or 32% of the sequences, consist of matches to human sequences: repetitive elements, mitochondrial genes, ribosomal RNA genes, and other nuclear genes. Forty-eight (8%) of the sequences matched non-human entries in GenBank or PIR while 230 (38%) had no significant matches. The remaining 134 (22%) sequences contained no insert or consisted entirely of polyA between the EcoRI cloning sites.

Thirty-six ESTs matched previously sequenced human nuclear genes with more than 97% identity. Four of these ESTs are from genes encoding enzymes involved in maintaining metabolic energy, including ADP/ATP translocase, aldolase C, hexokinase, and phosphoglycerate kinase. Human homologs of genes for the bovine mitochondrial ATP synthase  $F_0\beta$ -subunit and porcine aconitase were also found (Table 2). Brain-specific cDNAs included synaptophysin, glial fibrillary acidic protein (GFAP), and neurofilament light chain. At least six ESTs are from genes encoding proteins involved in signal transduction: 2',3'-cyclic nucleotide 3'-phosphodiesterase (2 ESTs), calmodulin, c-erbB- $\alpha$ -2,  $G_s\alpha$ , and  $Na^+/K^+$  ATPase  $\alpha$ -subunit. Other ESTs were matches to genes for ubiquitous structural proteins -- actins, tubulins, and

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fodrin (non-erythroid spectrin). ESTs also document the presence in the hippocampus cDNA library of the ret proto-oncogene, the ras-related gene rhoB, and one of the chromosome 22 breakpoint cluster region transcripts. Eight  
5 ESTs are from genes known to be associated with genetic disorders (Online Mendelian Inheritance in Man). More than half of the human-matched ESTs from Example 1 have been mapped to chromosomes, indicating the bias of GenBank entries toward well-studied genes and proteins.

10 ESTs without significant GenBank matches were also compared to the ProSite database of recognized protein motifs. Not counting post-translational-modification signatures, fifty-four sequences contained motifs from the database. Some patterns, particularly the "leucine zipper",  
15 are found in scores or hundreds of proteins that do not share the functional property implied by the presence of the motif.

Similarities to sequences from other organisms were also detected in the BLAST searches of GenBank and PIR (Table 2). Several ESTs displayed similarity to "housekeeping" genes,  
20 including the ribosomal proteins S10 and L30 (rat) and the above glycolytic enzymes. EST00257 (SEQ ID NO:77) shows strong nucleotide sequence similarity to the squid (67%) and Drosophila (70.4%) kinesin heavy chain. Kinesin was first described as a microtubule-associated motor protein involved  
25 in organelle transport in the squid giant axon (Vale et al, Cell 42: 39 (1985)). Six oncogene-related sequences were also among the cDNA clones sequenced. EST00299 (SEQ ID NO:180) and EST00283 (SEQ ID NO:271) show similarity to several ras-related genes and EST00248 (SEQ ID NO:102)  
30 matched the 3' untranslated region of the bovine substrate of botulinum toxin ADP-ribosyltransferase. Similarities with an S. cerevisiae RNA polymerase subunit and Torpedo electromotor neuron-associated protein were also observed. Two ESTs may represent new members of known human gene families: EST00270  
35 matched the three  $\beta$ -tubulin genes with 88-91% identity and

EST00271 (SEQ ID NO:248) matched  $\alpha$ -actinin with 85% identity at the nucleotide level.

Among the most interesting of the primary sequence relationships was the similarity of ESTs to the *Drosophila* genes Notch and Enhancer of split. Nucleotide and peptide alignments of EST00256 (SEQ ID NO:188) and EST00259 (SEQ ID NO:227) with the *Drosophila* genes have been demonstrated. Both genes are part of a signal cascade encoded by the "neurogenic" genes that are involved in the differentiation of neuronal and epidermal cell lineages in the neuroectoderm of the developing *Drosophila* embryo (Campos-Ortega, *Trends in Neuro. Sci.* 11: 400 (1988)). It has been proposed that the Enhancer of split protein interacts with a membrane protein that is the product of the Notch gene to convert a developmental signal into an altered pattern of gene expression (id. *J. Mol. Biol.* 215: 403 (1990)). EST00256 (SEQ ID NO:188) matches near the 5' end of the Enhancer of split coding sequence, away from the mammalian G protein  $\beta$  subunit- and yeast cdc4-like elements (Hartley et al, *Cell* 55: 785 (1988); Klambt et al. *EMBO J.* 8: 203 (1989)). Part of the EST00259 (SEQ ID NO:227) match to Notch in the cdc10/SW16 region that is similar to three cell-cycle control genes in yeast and is tightly conserved in the *Xenopus* Notch homolog, Xotch. In *Drosophila*, Enhancer of split is absolutely required for formation of epidermal tissue. Notch contains several epidermal growth factor-like repeats and appears to play a general role in cell-cell communication during development (Banerjee and Zipursky, *Neuron* 4:177 (1990)).

Seven genes were represented by more than one EST. Comparisons of all the ESTs against one another revealed two overlaps of unknown ESTs: EST00233 (SEQ ID NO:32) and EST00234 (SEQ ID NO:8) match in opposite orientations and EST00235 (SEQ ID NO:204) and EST00236 (SEQ ID NO:148) match in the same orientation beginning at the same nucleotide. Five human genes were represented by more than one EST:  $\beta$ -

actin (3),  $\lambda$ -actin (2),  $\alpha$ -tubulin (2),  $\alpha$ -2-macroglobulin (2), and 2'3'-cyclic-nucleotide-3'-phosphodiesterase (2). Those few instances where two or more ESTs represent different portions of a single cDNA can be readily ascertained when the sequence of the full cDNA insert is determined in accordance with Example 13.

#### Example 4

##### EST Sequences Characterization: Second Set

The ESTs of Example 2, including SEQ ID NOs 316-2407, were screened against known sequences listed in GenBank and other databases, as in Example 3. The results are reported in Table 2. The quality of the match is given as percent identity and length in base pairs for nucleotide matches and amino acid residues for peptide matches. In many cases ESTs match multiple domains on several related proteins; for example, EST00825 matches two transmembrane domains on both GABA and Norepinephrine transporters. Nucleotide databases are: GenBank (GB), and EMBL (E); peptide databases are: GenPept (GPU), Swiss-Prot (SP), and PIR.

The great majority (83%) of the partial cDNA sequences reported in Example 2 are unrelated to any sequences previously described in the literature. Based on database matches to known genes from humans as well as from such evolutionarily distant organisms as *E. coli*, yeast, *C. elegans*, *Drosophila*, barley, *Arabidopsis*, rice, and green algae, we have preliminarily identified the functional type of a number of the ESTs (Table 2). These include a novel gene similar to Notch/Tan-1 (Adams et al., supra), a new neurotransmitter transporter gene, and a new member of the multi-drug resistance gene family. Several genes involved in development or cell differentiation in *Drosophila* are represented by similar human ESTs, including seven in *absentia* (Carthew, R. & Rubin, G. *Cell* 63: 561-577 (1990)),

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big-brain (bib) (Rao, Y., Jan, L., & Jan, Y. *Nature* 345: 163-167 (1990)), the discs tumor suppressor (Woods, D. & Bryant, P. *Cell* 66: 1-20 (1991)), and the homeotic gene orthodenticle (Finkelstein, R., Smouse, D. Capaci, T., Spradling, A. & Perrimon, N. *Genes. Dev.* 4: 1516-1527 (1990)). New members of gene families previously known in humans include a  $\text{Ca}^{+2}$ -transporting ATPase, an ADP ribosylation factor, and a new neural-cell adhesion molecule gene.

The 1971 ESTs without a putative identification were analyzed using the coding-region prediction program CRM via the GRAIL server (Uberbacher, E. & Mural, R. *Proc. Natl. Acad. Sci. USA* 88: 11261-5 (1991)). Fifteen percent of the unknown ESTs scored an excellent probability of containing protein-coding sequence. Fifty percent of the ESTs to known human genes contain protein-coding sequences, therefore, at most half of the unknown ESTs are likely to contain coding sequences. We have found no evidence that genomic DNA or cDNA to unspliced precursor RNA is a major contaminant of either the hippocampus or fetal brain library.

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Table 2: ESTs Identified by Database Matches

| SEQ ID | EST#     | Putative Identification                            | Accession   | DB  | Len | %ID   |
|--------|----------|----------------------------------------------------|-------------|-----|-----|-------|
| 208    | EST00250 | 60K filarial antigen                               | A28209      | PIR | 108 | 56.9  |
| 2320   | EST01784 | 60K filarial antigen                               | A28209      | PIR | 88  | 50.6  |
| 969    | EST01982 | ADP-ribosylation factor 1                          | B33283      | PIR | 84  | 41.2  |
| 1834   | EST01620 | AMP deaminase, brain                               | A37056      | PIR | 57  | 100.0 |
| 97     | EST00289 | Aconitase                                          | A35544      | PIR | 105 | 90.6  |
| 251    | EST00370 | Actin, other                                       | S10021      | PIR | 44  | 51.1  |
| 248    | EST00271 | Actinin, alpha                                     | HUMACTAR    | GB  | 271 | 85.3  |
| 891    | EST01891 | Actinin, alpha                                     | HUMACTAR    | GB  | 315 | 81.6  |
| 1500   | EST02538 | Actinin, alpha                                     | HUMACTAR    | GB  | 271 | 75.0  |
| 132    | EST00110 | Agrin                                              | RATAGR      | GB  | 269 | 82.2  |
| 1852   | EST01625 | Agrin                                              | RATAGR      | GB  | 103 | 84.6  |
| 1094   | EST02113 | Ala                                                | HUMALA      | GB  | 92  | 82.8  |
| 691    | EST00675 | Alcohol dehydrogenase                              | RICGOS2G_1  | GPU | 38  | 59.0  |
| 2408   | EST00244 | Amyloid A4                                         | HUMAFPA4    | GB  | 135 | 91.9  |
| 1965   | EST01664 | Amyloid A4                                         | A29030      | PIR | 52  | 54.7  |
| 2068   | EST01694 | Amyloid A4                                         | QRHUA4      | PIR | 83  | 69.0  |
| 2092   | EST01700 | Anion exchanger homolog AE3                        | A33638      | PIR | 95  | 97.9  |
| 1880   | EST01634 | Axonal glycoprotein TAG-1                          | A34695      | PIR | 69  | 87.1  |
| 1492   | EST02530 | B cell-specific Mo-MLV integration site 1 (bmi-1)  | MUSBM11A    | GB  | 111 | 87.5  |
| 1277   | EST02306 | Bib protein                                        | S09699      | PIR | 57  | 53.4  |
| 13     | EST00255 | Cadherins                                          | CADN9HUMAN  | SP  | 41  | 45.2  |
| 1348   | EST02378 | cAMP-dependent protein kinase inhibitor            | MUSPKI      | GB  | 234 | 91.5  |
| 1931   | EST01041 | cAMP-regulated phosphoprotein                      | B35308      | PIR | 21  | 86.4  |
| 1413   | EST02447 | cAMP-specific phosphodiesterase                    | HUMPDEAA    | GB  | 263 | 69.0  |
| 396    | EST01443 | CDPdiacylglycerol-serine O-phosphatidyltransferase | JHO368      | PIR | 33  | 41.2  |
| 1956   | EST01663 | Ca2+-transporting ATPase 2                         | B28065      | PIR | 125 | 88.9  |
| 1126   | EST02146 | Calbindin D28                                      | RATCALBD28  | GB  | 81  | 87.8  |
| 1039   | EST02055 | Calcium channel                                    | S05054      | PIR | 33  | 67.6  |
| 1910   | EST01645 | Calmodulin                                         | RATRCM1     | GB  | 120 | 90.1  |
| 485    | EST01466 | Calmodulin-dependent protein kinase, type II, beta | A26464      | PIR | 93  | 98.9  |
| 913    | EST01913 | Clathrin coat assembly protein AP50 homolog        | YSCYAP54_1  | GPU | 62  | 63.5  |
| 2004   | EST01676 | Cofilin                                            | PIGCOFIL    | GB  | 132 | 89.5  |
| 2400   | EST01824 | Cysteine-rich intestinal protein                   | GYRTI       | PIR | 56  | 66.7  |
| 1588   | EST02633 | D2223 repetitive DNA                               | HUMREP      | GB  | 160 | 76.4  |
| 2192   | EST01257 | Diacylglycerol kinase, lymphocyte                  | S09156      | PIR | 44  | 42.2  |
| 1441   | EST02477 | Diamine acetyltransferase                          | ATDA6HUMAN  | SP  | 74  | 45.3  |
| 650    | EST00642 | Dilute (myosin heavy chain)                        | MUSDILUTE_1 | GPU | 27  | 100.0 |
| 2302   | EST01779 | Discs-large tumor suppressor                       | DRODLGA_1   | GPU | 53  | 63.0  |
| 188    | EST00256 | Enhancer of split                                  | A30047      | PIR | 86  | 58.6  |
| 2289   | EST01325 | Fatty acid synthase                                | RATFAS      | GB  | 98  | 79.8  |
| 310    | EST00377 | Fo ATPase beta subunit, mitochondrial              | BOVMTAS8    | GB  | 293 | 85.4  |
| 1332   | EST02362 | GA binding protein, beta subunit                   | MUSGAC_1    | GPU | 86  | 90.8  |
| 1667   | EST00825 | Gamma-aminobutyric acid transporter                | A35918      | PIR | 26  | 59.3  |
| 2217   | EST01738 | Gelatin factor ABP-280                             | A37098      | PIR | 74  | 80.0  |
| 1412   | EST02446 | Glutamate-aspartate carrier protein                | JV0092      | PIR | 57  | 37.9  |
| 1020   | EST02034 | Glutaminase                                        | GLS9RAT     | SP  | 34  | 74.3  |
| 1885   | EST01639 | Histocompatibility antigen modifier 1              | A37779      | PIR | 63  | 75.0  |
| 1495   | EST02533 | Hypothetical 43.5K protein                         | JU0319      | PIR | 43  | 52.3  |
| 2326   | EST01791 | Inositol-1,4,5-trisphosphate 3-kinase              | JN0129      | PIR | 65  | 68.2  |
| SEQ ID | EST#     | Putative Identification                            | Accession   | DB  | Len | %ID   |

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|        |          |                                                         |             |     |     |      |
|--------|----------|---------------------------------------------------------|-------------|-----|-----|------|
| 724    | EST01529 | Interferon-induced 54K protein                          | INI49HUMAN  | SP  | 76  | 70.1 |
| 1035   | EST02051 | J1 protein                                              | MUSJ1PRO    | GB  | 362 | 85.7 |
| 1229   | EST02258 | KUP protein                                             | HUMKUPMR_1  | GPU | 54  | 36.4 |
| 993    | EST02007 | Kinase 5 protein                                        | CHKCEK5_1   | GPU | 68  | 94.2 |
| 77     | EST00257 | Kinesin                                                 | A35075      | PIR | 57  | 86.2 |
| 78     | EST00258 | Kinesin                                                 | A35075      | PIR | 62  | 47.6 |
| 2245   | EST01748 | Kinesin                                                 | A35075      | PIR | 98  | 52.5 |
| 2282   | EST01764 | Lamin B receptor                                        | A38427      | PIR | 76  | 71.4 |
| 2173   | EST01724 | Lon protease                                            | JO0901      | PIR | 103 | 41.3 |
| 1427   | EST02463 | Long-chain-fatty-acid-CoA ligase                        | A36275      | PIR | 36  | 62.2 |
| 313    | EST00276 | Lysosomal membrane glycoprotein 1 (LAMP-1)              | A31959      | PIR | 53  | 46.3 |
| 161    | EST00247 | MARCKS (myristoylated alanine-rich protein kinase       | BOVMARCKS   | GB  | 139 | 83.6 |
| 1386   | EST02418 | MARCKS homolog                                          | MMF52       | EU  | 237 | 92.4 |
| 769    | EST00734 | MARCKS homolog                                          | S08341      | PIR | 61  | 40.3 |
| 43     | EST00371 | Maternal G10 protein                                    | S05955      | PIR | 38  | 92.3 |
| 1468   | EST02505 | Matrin 3                                                | RATMATRIN3  | GB  | 137 | 93.5 |
| 639    | EST00632 | Membrane transport superfamily (GTP-dependent)          | A24400      | PIR | 63  | 39.1 |
| 1894   | EST01643 | Membrane transport superfamily (GTP-dependent)          | A24400      | PIR | 71  | 50.0 |
| 824    | EST01865 | Microtubule-associated protein 1B                       | RATNEU      | GB  | 293 | 86.4 |
| 223    | EST00368 | Microtubule-associated protein 1B                       | A33645      | PIR | 30  | 54.8 |
| 2032   | EST01683 | Microtubule-associated protein 1B                       | A33645      | PIR | 49  | 62.0 |
| 2017   | EST01678 | Milk fat globule membrane protein                       | A36479      | PIR | 48  | 61.2 |
| 1704   | EST01580 | Myeloid differentiation primary response gene MyD1      | MUSMYD118_1 | GPU | 76  | 88.3 |
| 2226   | EST01744 | NAD(P) + transhydrogenase (B-specific)                  | DEBOXM      | PIR | 86  | 93.1 |
| 1567   | EST02610 | Neural cell adhesion molecule L1                        | S05479      | PIR | 82  | 43.4 |
| 506    | EST01471 | Neuraxin                                                | S06017      | PIR | 120 | 84.3 |
| 1566   | EST02609 | Neutrophil oxidase factor                               | A34855      | PIR | 43  | 47.7 |
| 952    | EST01961 | Notch/Xotch                                             | HUMTAN1_1   | GPU | 85  | 57.0 |
| 227    | EST00259 | Notch/Xotch                                             | A35844      | PIR | 74  | 85.3 |
| 1395   | EST02429 | Nuclear factor 1-like protein (NF1)                     | HAMNF1A     | GB  | 111 | 92.0 |
| 1681   | EST01573 | Nucleoside diphosphate kinase                           | A33386      | PIR | 71  | 52.8 |
| 346    | EST01828 | Otd homeotic protein                                    | A35912      | PIR | 35  | 52.8 |
| 2254   | EST01751 | Phosphatidylinositol-4,5-bisphosphate phosphodiesterase | A28807      | PIR | 40  | 90.2 |
| 1869   | EST00992 | Polymyxin B resistance                                  | A32714      | PIR | 20  | 76.2 |
| 93     | EST00287 | Processing enhancing protein                            | S03968      | PIR | 96  | 58.8 |
| 2353   | EST01806 | Prohibitin                                              | RATPROHIB_1 | GPU | 120 | 97.5 |
| 2297   | EST01775 | Prohormone cleavage enzyme                              | MUSMPC1A_1  | GPU | 91  | 93.5 |
| 9      | EST00376 | Prolyl endopeptidase                                    | PIGPREP     | GB  | 223 | 83.9 |
| 1069   | EST02087 | Protein kinase C, zeta                                  | HUMPKCL     | GB  | 382 | 58.7 |
| 1933   | EST01650 | Protein phosphatase 2A beta subunit                     | HUMPROP2AB  | GB  | 288 | 76.8 |
| 202    | EST00298 | Protein-tyrosine phosphatase LRP                        | LRP4MOUSE   | SP  | 62  | 44.4 |
| 1654   | EST01572 | Protochlorophyllide reductase                           | S04783      | PIR | 34  | 57.1 |
| 38     | EST00374 | RNA polymerase II 6th subunit (RPO26)                   | A36352      | PIR | 72  | 75.3 |
| 1478   | EST02515 | Rab5                                                    | F34323      | PIR | 91  | 82.6 |
| 2368   | EST01389 | Radial spoke protein 3                                  | S05962      | PIR | 58  | 52.5 |
| 37     | EST00038 | ras p21-like small GTP-binding protein (smg GDS)        | BOVSMGGDS   | GB  | 131 | 89.4 |
| 180    | EST00299 | ras-related proteins                                    | S10493      | PIR | 51  | 46.1 |
| 1700   | EST01579 | Retrovirus-related gag polyprotein                      | FOHUE2      | PIR | 95  | 77.1 |
| 1511   | EST02550 | Retrovirus-related pol polyprotein                      | GNLJGL      | PIR | 50  | 54.9 |
| 102    | EST00248 | rho H12/ ARH12                                          | BOVBGBRH    | GB  | 195 | 79.6 |
| 1715   | EST01583 | Ribosomal protein L18a                                  | R5RT18      | PIR | 68  | 95.7 |
| SEQ ID | EST#     | Putative Identification                                 | Accession   | DB  | Len | %ID  |

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|      |          |                                           |             |     |     |       |
|------|----------|-------------------------------------------|-------------|-----|-----|-------|
| 1856 | EST01627 | Ribosomal protein L1a                     | A24579      | PIR | 75  | 63.1  |
| 1974 | EST01667 | Ribosomal protein L3                      | JQ0771      | PIR | 74  | 80.0  |
| 301  | EST00300 | Ribosomal protein L30                     | R6RT30      | PIR | 57  | 96.5  |
| 22   | EST00301 | Ribosomal protein S10                     | R3RT10      | PIR | 66  | 97.0  |
| 2402 | EST01826 | Ribosomal protein S10                     | R3YM10      | PIR | 36  | 51.4  |
| 463  | EST01459 | Ribosomal protein YL10                    | S11581      | PIR | 40  | 68.3  |
| 1408 | EST02442 | Seven in absentia                         | A36195      | PIR | 46  | 80.8  |
| 299  | EST00249 | smg p25A GDP dissociation inhibitor       | A35652      | PIR | 97  | 77.5  |
| 951  | EST01960 | Spectrin, beta                            | HUMSPTB     | GB  | 268 | 67.7  |
| 2089 | EST01899 | Sperm membrane protein                    | A35981      | PIR | 52  | 58.5  |
| 2073 | EST01697 | Succinate dehydrogenase flavoprotein      | BOVSDHFP1_1 | GPU | 44  | 100.0 |
| 2138 | EST01715 | Succinate dehydrogenase flavoprotein      | BOVSDHFP1_1 | GPU | 49  | 92.0  |
| 430  | EST00472 | Synaptotagmin (p65)                       | SY65\$HUMAN | SP  | 27  | 53.6  |
| 1371 | EST02402 | Talin                                     | MUSTALINR_1 | GPU | 79  | 81.2  |
| 1771 | EST01601 | Thiosulfate sulfurtransferase (rhodanese) | ROBO        | PIR | 65  | 81.8  |
| 300  | EST00232 | Transforming protein (dbl)                | TVHUDB      | PIR | 25  | 65.4  |
| 189  | EST00282 | trkB                                      | A35104      | PIR | 33  | 67.6  |
| 653  | EST01512 | Tubulin, alpha                            | HUMTUBAG    | GB  | 223 | 75.0  |
| 594  | EST01490 | Tubulin, beta                             | HUMTBB5     | GB  | 298 | 93.6  |
| 757  | EST01542 | Tubulin, beta                             | HUMTUBBM    | GB  | 217 | 90.4  |
| 1245 | EST02274 | Tubulin, beta                             | A26561      | PIR | 105 | 88.7  |
| 1147 | EST02169 | Tyrosine kinase                           | HUMECK      | GB  | 384 | 74.3  |
| 1701 | EST00853 | Unc-104                                   | JN0114      | NR  | 36  | 45.0  |
| 2121 | EST01711 | Valine-tRNA ligase                        | A29871      | PIR | 56  | 57.9  |
| 187  | EST00152 | Wilm's tumor-related protein              | HUMQM       | GB  | 228 | 99.6  |
| 1726 | EST01588 | XPR2 alkaline extracellular protease      | 826955      | PIR | 88  | 46.1  |
| 249  | EST00275 | Zinc Finger Proteins                      | S06551      | PIR | 25  | 57.7  |
| 413  | EST01446 | Zinc Finger Proteins                      | S00754      | PIR | 45  | 60.9  |
| 469  | EST01460 | Zinc Finger Proteins                      | C32891      | PIR | 34  | 54.3  |
| 833  | EST01560 | Zinc Finger Proteins                      | S00754      | PIR | 105 | 67.0  |
| 1230 | EST02259 | Zinc finger proteins                      | S00754      | PIR | 71  | 62.5  |
| 1496 | EST02534 | Zinc finger proteins                      | A34612      | PIR | 50  | 45.1  |
| 2324 | EST01352 | Zinc Finger Proteins                      | S10397      | PIR | 29  | 56.7  |

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There is little redundancy in EST sequencing according to the present invention. Of the nuclear-encoded messenger RNAs, the most common ESTs were to the  $\beta$ -actin (0.6% of the EST clones) and myelin basic protein genes (MBP, 0.5% of the clones). MBP, a highly expressed structural component of nerve tissue (Kamholtz, J., de Ferra, F., Puckett, C., & Lazzarini, R. *Proc. Natl. Acad. Sci., USA* 83: 4962-4966 (1986)), displays four alternate splicing forms, of which at least two are present among the ESTs reported here. Other common ESTs were Gs-alpha gamma-actin and both a- and alpha-tubulin.

By matching ESTs to known database sequences, a phenotypic characterization of the tissue begins to emerge. Protein superfamilies matched by ESTs were grouped into three broad functional categories to assess the biological spectrum represented by these randomly selected cDNA clones. Structural and metabolic classes comprised about 30% of the ESTs with database matches. Twenty-five percent were involved in regulatory pathways and the remainder were not classifiable. Eleven of the eighteen enzymes of glycolysis and the citric acid cycle are represented by at least one subunit or isozyme. In addition, several genes not previously known to be expressed in the brain were matched, including spermine/spermidine acetyltransferase (Casero, R., Celano, P., Ervin, S., Applegren, N., Wiest, L. & Pegg, A. *J. Biol. Chem.* 266: 810-814 (1991)) and osteopontin (Young, M., Kerr, J., Termine, J., Wewer, U., Wang, M., McBride, W. & Fisher, L. *Genomics* 7:491-502 (1990)).

#### EXAMPLE 5

##### Mapping of ESTs to Human Chromosomes

Randomly selected ESTs corresponding to SEQ ID NOs. were assigned to chromosomes via PCR (see Table 3). Oligonucleotide primer pairs were designed from EST

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sequences to minimize the chance of amplifying through an intron. The oligonucleotides were 18-23 bp in length and designed for PCR amplification using the computer program INTRON (National Institutes of Mental Health, Bethesda, MD). The program is based on the assumptions that: 1) introns are genomic sequences that interrupt the coding and noncoding sequences of genes (Smith, J. Mol. Evol. 27:45-55 (1988)); 2) there are consensus sequences for splice junctions (Shapiro, et al., Nucl. Acids Res. 15:7155-7174 (1987)); and 3) that 90% of the human genes studied have 3' untranslated regions of mRNA not interrupted by introns in the genomic DNA (Hawkins, Nucl. Acids Res. 16:9893-9908 (1988)).

The program evaluates the likelihood that a given GG or CC dinucleotide represents a former exon-intron boundary. Specifically, every input strand is processed by the INTRON program twice, first evaluating the sense mRNA strand, and then processing the complementary or anti-sense strand. The program evaluates each sequence by finding all GG or CC pairs (possible former splice sites), searching for STOP codons in all three reading frames, and analyzing the GG or CC pairs surrounded by stop codons. All regions of the EST that are unlikely to contain splice junctions based on CC content, GG content, and stop codon frequency are then marked by the program in uppercase.

The creation of PCR primers from known sequences is well known to those with skill in the art. For a review of PCR technology see Erlich, H.A., PCR Technology: Principles and Applications for DNA Amplification. 1992. W.H. Freeman and Co., New York. ESTs were examined for the presence of stop codons in each reading frame and for consensus splice junctions. The presence of stop codons and absence of splice junction sequences are more characteristic of 3' untranslated sequences than of introns. The untranslated sequences are unique to a given gene; thus, primers from

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these regions are less likely to prime other members of a gene family or pseudogenes.

The primers were used in polymerase chain reactions (PCR) to amplify templates from total human genomic DNA. PCR conditions were as follows: 60 ng of genomic DNA was used as a template for PCR with 80 ng of each oligonucleotide primer, 0.6 unit of Tag polymerase, and 1 uCi of a <sup>32</sup>P-labeled deoxycytidine triphosphate. The PCR was performed in a microplate thermocycler (Techne) under the following conditions: 30 cycles of 94°C, 1.4 min; 55°C, 2 min; and 72°C, 2 min; with a final extension at 72°C for 10 min. The amplified products were analyzed on a 6% polyacrylamide sequencing gel and visualized by autoradiography. If the size of the resulting product was equivalent to the EST from which the primers are derived, then the PCR reaction was repeated with DNA templates from two panels of human-rodent somatic cell hybrids; BIOS PCRable DNA (BIOS Corporation) and NIGMS Human-Rodent Somatic Cell Hybrid Mapping Panel Number 1 (NIGMS, Camden, NJ).

PCR was used to screen a series of somatic cell hybrid cell lines containing defined sets of human chromosomes for the presence of a given EST. DNA was isolated from the somatic hybrids and used as starting templates for PCR reactions using the primer pairs from EST sequences selected above. Only those somatic cell hybrids with chromosomes containing the human gene corresponding to the EST will yield an amplified fragment. ESTs were assigned to a chromosome by analysis of the segregation pattern of PCR products from hybrid DNA templates. For a review of techniques and analysis of results from somatic cell gene mapping experiments. (See Ledbetter et al., *Genomics* 6:475-481 (1990).) The single human chromosome present in all cell hybrids that give rise to an amplified fragment represents the chromosome containing that EST.

The assignment of 100 ESTs and corresponding genes to chromosomes by PCR is shown in Table 3.

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Table 3: Assignment of ESTs to Chromosomes by PCR

| SEQ ID | EST#     | Chr | PRIMER #1                 | PRIMER #2              |
|--------|----------|-----|---------------------------|------------------------|
| 5      | EST00012 | 1   | TCCAGGCAATCCCAGAATAG      | CTAATTGAGCTCACTGGCCC   |
| 57     | EST00058 | 1   | CTGTTTGCAAGTTTCAAAGC      | GCCATTTCTAACAACCAGAG   |
| 64     | EST00066 | 1   | GCCATTGTGCTGAATAGAGT      | GTTAGTGTTCCTTAGCAAG    |
| 83     | EST00079 | 1   | CAGCTAATTGACCTGGGCTA      | CAACATGCTCTGAGCTTTAG   |
| 83     | EST00079 | 1   | GGCAGAGCATAATGAGTATA      | CATATGCATATGGTCCCCTAT  |
| 91     | EST00086 | 1   | AGTTTAGATGGAGGGCTGTC      | CTGCCCCTAATGCGCAGGCT   |
| 105    | EST00365 | 1   | CTTAATCACCTCCCTTTTGT      | CCTTAGTTGGAGATAAGGTC   |
| 109    | EST00095 | 1   | AGTCTAATCCTGTACACTTG      | CGGGCTTTCTCTGAATTGGT   |
| 116    | EST00100 | 1   | TTAGAAGTGCCCATGGGAGG      | TTTTAAGGCTCTGGAGTGTT   |
| 141    | EST00118 | 1   | CTCAGAGAAACTTAGGTGAA      | CTACAGAATCATTCCACCAG   |
| 220    | EST00372 | 1   | AAGTTGCACATTGCCCAAGG      | ATAGTACTGCAAGGTTATTC   |
| 237    | EST00187 | 1   | TTACAAATTTCTCTTGACGC      | CTGAAGGAGCACAGTTTCTC   |
| 242    | EST00192 | 1   | GGATCAGATAATCAAACAGG      | GCTTAGGATATGAATGCATA   |
| 259    | EST00202 | 1   | GCATCAGAGTTTAACTGAGG      | CTACATATTTGTGCTCCTT    |
| 269    | EST00293 | 1   | CTGTTGCTGTGCAGTAGCTT      | CTTTTGACCCAGTGAAACTT   |
| 299    | EST00249 | 1   | GATCATGCAGACGTAGATAT      | CCAACCTCTGCCAGATCATT   |
| 1651   | EST00810 | 1   | TAGTCGCTGTAAGTTGATTC      | GCTTTGCTGGATGCTTCATT   |
| 16     | EST00021 | 2   | CAGGCAAGTTTCTTCCAGGA      | TCAGACCCATGGTCAGCTT    |
| 1898   | EST01013 | 2   | GGCTGAGAACGGTTAGCATA      | CCCTCAGCTTAGGGGAATG    |
| 8      | EST00234 | 2   | TAGAAGGCAAACTATGTCCC      | GGTTGAGGATTGGCTTTTAC   |
| 36     | EST00037 | 2   | AGCCAGAAGGCTGCTTAAAG      | GCAGTGAACCACTACTCCTA   |
| 123    | EST00106 | 2   | GTCTAATTTGTAACTTCAG       | GATAGATTGTATAAGAAGCC   |
| 192    | EST00155 | 2   | GATTTATGTCTGGGAACATA      | GCAGCATGTGAAAGAATGAT   |
| 200    | EST00162 | 2   | TTAATGGGTGGTGGGAGCT       | CGATGCACATCCTTCTCCAT   |
| 284    | EST00216 | 2   | CCTAAGAATTCGTTTGGCTC      | GTCTGGCACATAATAGATTTG  |
| 102    | EST00248 | 3   | ATACTACATCTAGTCTGG        | TTACAGTTCTGTGGTTTTT    |
| 167    | EST00138 | 3   | AAACAGCTGCGGAGTACA        | AAAGGATCCTCCACTCCAGA   |
| 12     | EST00274 | 3   | CCTAGCAAACCTCATACACAC     | CATAAGTGAATGGACACAGG   |
| 60     | EST00062 | 3   | ACACATTAAACGGTGCTGCAG     | GGAATCAGCCCTTGAGGACT   |
| 77     | EST00257 | 3   | AAGCTCACAACGCAGATCTG      | CTGGAACAGCTTACAAAGGT   |
| 107    | EST00093 | 3   | ATTGAACTCTGTCAACAGTG      | TGTAAACAAAGGCCAAACT    |
| 108    | EST00094 | 3   | AL2-GCAGGATGTCAGTCTTTGAG  | AGCACACATTATCTACCACGGC |
| 1706   | EST00857 | 3   | AL2-GCAGGATGTCAGTCTTTGAG  | CCAGCACACATTATCTACCACG |
| 37     | EST00038 | 4   | AACTTCGCAGTCATGAGAAC      | TGTATCGGGCAGTTCTCAG    |
| 6      | EST00013 | 4   | CACATGTTCTCCCTCTTTCA      | GCATTTTGGAGCTCTTCCGT   |
| 37     | EST00038 | 4   | AL2-GGAAGTACAGGATTTGGC    | TTAGAGATGGGATGATGCCG   |
| 31     | EST00033 | 5   | TGGGTACCCTAAGGTGTTTG      | GACTAATCTAAGGTCTAGG    |
| 28     | EST00030 | 5   | AGATAAGTTAGGAAGCTGGT      | ACTCACTGCTAGTATCATCC   |
| 59     | EST00061 | 5   | AAAGTTTCTTAGCACCCCCC      | CAGACTTTGACAAAAGAATC   |
| 74     | EST00073 | 5   | ATCAGACACGTGGCAGGGTT      | AAGTCCCTGAGGGTGACAGAA  |
| 121    | EST00104 | 5   | TGAAGGCAGCTGCTAAATCT      | GGATGTATTGATCTGACTCA   |
| 149    | EST00123 | 5   | ATACTGTCAACGGAGGGTGA      | GTCTGCAGGTTTCTCCTTGA   |
| 235    | EST00185 | 5   | TTACTGTCCCATCAGATATC      | TACACTCTTAAGAAGGTATG   |
| 1643   | EST00803 | 5   | GAGCGTTTAAAAGAGATTCT      | TACAGACAGCCATGTTCCAA   |
| 1677   | EST00835 | 5   | AL2-TCTCCAACACAGTCATGC    | CGGATGCCATCATATACC     |
| 23     | EST00026 | 5   | CCTGCAGTGACACTTAACAT      | CTGCTCACCTGAAATTGATAC  |
| 121    | EST00104 | 5   | AL2-CAGATCAATACATCCTCTGGG | CTGTGCAGTGGTGAGTAAAAGG |

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| SEQ ID | EST#     | Chr | PRIMER #1                   | PRIMER #2              |
|--------|----------|-----|-----------------------------|------------------------|
| 1      | EST00007 | 6   | TAGTTGATGGTCTGGGTTAT        | GAAATCCCAGGGAGACAATG   |
| 19     | EST00023 | 6   | CAACTTACATTAGGGGTTTG        | GACCTCATTAGAAGAGCCCA   |
| 155    | EST00129 | 6   | GGAAGCTGCCATATAAGCTC        | TCAGTGTCGTACAATCTACC   |
| 224    | EST00356 | 6   | GCTGTATGTTAACCCCTTGT        | TGGAACCCCTCAAACACTGCT  |
| 288    | EST00219 | 6   | ACTTTCATGTTGAGAAGTAT        | ATCTAGCTGAAACATTGTAG   |
| 1638   | EST00798 | 6   | CTTCATCTGTTAACTGTTGA        | TGAAAATGAGTCACAGGCAG   |
| 1675   | EST00833 | 6   | AL2 - ACCCAGTTCTCAAAGACC    | GGTTTACCATTTCAGAGGC    |
| 22     | EST00301 | 6   | CTCCGTGATTACCTTCATCT        | TTGTAGGTATCTCTGTGAGCT  |
| 207    | EST00167 | 7   | GGTGCTACTTTGTGAATGCT        | AGCAATGTGATTTTGTAGG    |
| 137    | EST00272 | 7   | AGTGGTCACTATCTACATGG        | GATTGAGAATTACTAAGCCG   |
| 1659   | EST00817 | 7   | TGTATAGGCTCTACATAAAG        | CTTAATCATGGATTCTTCGT   |
| 1680   | EST00838 | 7   | AL2 - GTTCTTTCCCAGGTATGC    | TTGTTGGTACTGAGGAAGTGCG |
| 292    | EST00223 | 8   | TGCAGCAGTGACCATGAGAA        | ATCATCTTTCCACGCGGCTT   |
| 134    | EST00375 | 9   | TCTGGGCTTCTGTGGTTCAA        | CTGGCTGCTCAGCAACTCAT   |
| 1906   | EST01021 | 9   | GGATGTTTTCTATGTGACGA        | TTCCAGTGCCCTTTTGTC     |
| 1645   | EST00804 | 10  | CTCCTTTGGGACAAACAACT        | CCAACCCAAACATATTCTA    |
| 20     | EST00024 | 10  | AGCTGTTCCTGAGAGTGCA         | CCTTGTGAAGAAAGACTTTC   |
| 157    | EST00131 | 10  | TCAGCAACAGGTCACTTTGG        | CTAAGCATCTGCATCTCCAG   |
| 172    | EST00142 | 10  | TACTAGCATTTCTTACTCTC        | TATGCTGATTGTTTGCACTC   |
| 250    | EST00197 | 10  | GGTGATTAGAGAGTCTGTTG        | GAAGCTCTGTAGTGTCTAAA   |
| 133    | EST00111 | 11  | GGAAATTAGGCTTAGCTCAC        | GTGCAGAATACTTAGAGTCC   |
| 178    | EST00294 | 11  | GTTTGAAGGAAGTGATTTCC        | TAGGGCCACCTCCAGTTCAT   |
| 10     | EST00016 | 11  | GTCTTTGGATTCTACGTAGA        | CGATAATGACATTTCTTCTGG  |
| 126    | EST00109 | 11  | AL2 - CTAACCACAACCCACACATTG | CCTCAGCACAGAAGAATGG    |
| 7      | EST00014 | 12  | AACCTGCAACATAAATACTAG       | GAGCAATGATTTCTAACAGT   |
| 254    | EST00200 | 13  | TTGTGTACTGTCTGATAGAC        | TAAGCCATGGGCATCTATAA   |
| 2409   | EST00273 | 13  | GCAAGATGATGGAACATCCC        | TTCTTCTGGAGGCTCTACA    |
| 170    | EST00295 | 14  | GGTGCTTAAGGCCACTTTTG        | CTTAGAGGATCATAGGTCTG   |
| 255    | EST00201 | 14  | CCAGGAGAGTAAGAAGATCA        | GCAGAGTTGAATATGAACCT   |
| 290    | EST00221 | 14  | GTGCCAAGATGGCTCATGTA        | GTATAGCTTTAAGCCAGTTC   |
| 293    | EST00224 | 14  | AATGCATTATGCCTGGTCTT        | GGAAAAGTCTAGAAGTCTAGT  |
| 1664   | EST00822 | 14  | GGGTCAGAATTAAGAGGTCT        | GTTTCATCTCTAACTCCTTTC  |
| 315    | EST00008 | 14  | AAGCTGGCTGGGAAATGTTT        | GTCATGCTAGTAACTTACAC   |
| 1689   | EST00845 | 14  | AL2 - AGGAGGAAGCTGAAATCC    | GGAAGTCCATAAGAGACTCACC |
| 95     | EST00088 | 15  | GTGACAGACCATGTCTATTG        | AAGTGAGCGATTGCACCTTC   |
| 205    | EST00165 | 15  | AGGATGACCTGAGTGAGCTG        | CCATGGCAGCAAGGAACTCT   |
| 33     | EST00034 | 16  | TGTGTGAAAGGGAGTCTTGT        | CCATTTTGAAGTGTCCATAG   |
| 247    | EST00279 | 16  | TGGCTAGGGCAGGCCCTTAA        | GAGAAGAATATCAAATGGGG   |
| 18     | EST00373 | 16  | CCATCTGTGTCCCAATTAAGC       | AGGGAAGAAGTCTAGAGCGA   |
| 68     | EST00068 | 17  | CAAAGACGGGAGACGAATGA        | AGTGGAACGCGTGGCCTATG   |
| 1652   | EST00811 | 17  | GAGCTGCATGTTGATAAGTA        | TTGACTTAAGCTGACCTTAA   |
| 1702   | EST00854 | 17  | AL2 - TTGCTGTGGAATCCATGAGAG | GGCAAGTGATCTGTTCTTGG   |
| 84     | EST00080 | 19  | AGAGATGTCAGTCCATTATC        | CTATTCCACCTTACTCAAGG   |
| 223    | EST00368 | 19  | CATCATGTGCGAGACGCATT        | TGGATGACCTGAGTCTGCAG   |
| 21     | EST00025 | 20  | AGTTCTGGAGGCTAGGAGTT        | ATGTAAGGACCCCTAGATGG   |
| 210    | EST00168 | 20  | TGTCAACTTCCCTTTGGCCT        | GAAGCTTGCTCATTTCAGGAA  |
| 136    | EST00113 | 20  | AL2 - TCGGAGAAGTTGAGTTTCTG  | GTTAAAAGCTGTTAGACGGGGC |
| 120    | EST00103 | 22  | CACTGACTGACTCCTCTTTA        | GGAACCGTAAGTCTCCATAG   |
| 313    | EST00276 | X   | ATTGACCTTCAATGTAATAA        | TTGGATTGGGCAAAATAG     |

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| <u>SEQ ID</u> | <u>EST#</u> | <u>Chr</u> | <u>PRIMER #1</u>       | <u>PRIMER #2</u>       |
|---------------|-------------|------------|------------------------|------------------------|
| 162           | EST00133    | X          | ATGTGAGCATCTATACCTGC   | AATGAAGGCATGAGAATAGG   |
| 1669          | EST00827    | X          | CGGACAACTAGGATAAATGC   | TACGCGTTTGAATGGCTTGA   |
| 1917          | EST01029    | X          | GAATAGCATTATTAGCCAGT   | GGACCTATTGGAGATCTACT   |
| 1708          | EST00858    | X          | AL2-AAGGCGAGGATTATGTGC | TTCTACTGGGTACACTTCGACC |

Abbreviation: AL2: Amino-Link-2 Fluorescent Tag, Chr.: Chromosome.

The foregoing techniques have been used to further localize 9 ESTs and their associated genes to precise locations onto chromosome 6 or chromosome X, as reflected in Table 4A (in Example 7 below), using sublocalization techniques that employ somatic cell hybrids. ESTs were used as hybridization probes and mapped to other chromosomes using techniques disclosed in Example 7. Somatic cell hybrids were prepared that contained defined subsets of chromosomes 6 and X. Methods for preparing and selecting somatic cell hybrids are known in the art. For a review of an exemplary procedure to generate somatic cell hybrids containing the short arm of human chromosome 6, see Zoghbi, et al., *Genomics* 9(4):713-720 (1991). For a general review of somatic cell hybridization see Ledbetter et al. (supra). The hybrids were processed to obtain DNA and analyzed by PCR and by fluorescence in situ hybridization. SEQ ID NOs 19, 22, 1, 224, 288 mapped to chromosome 6, while SEQ ID NOs 162, 1917, 1699 and 1899 mapped to chromosome X using somatic cell hybrids.

#### EXAMPLE 6

##### Mapping of All ESTs to Human Chromosomes

The procedure of Example 5 is repeated for all of the ESTs from Examples 1 and 2 not previously mapped to human chromosomes. Data are generated corresponding to the data in Table 3 for all of the unmapped ESTs. As previously mentioned, virtually all of the ESTs will map to a unique chromosomal location. The inability of any ESTs to localize to a unique location will be readily ascertainable during the mapping process.

Physical mapping of the type reported in Table 4 on all the EST clones reported here would provide human chromosome markers spaced on average every 1.2 megabases and would roughly double the number of expressed sequences that have been localized to chromosomes (McKusick, V. FASEB

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J. 5: 12-20 (1991)). Mapped ESTs are also a new resource to identify candidates for the estimated 5000 single-locus disease-associated genes (Id.).

#### EXAMPLE 7

5        Alternative Technique for Mapping to Chromosomes  
      Mapping of ESTs to chromosomes using fluorescence in situ  
          hybridization

10        This technique was used to map an EST to a particular location on a given chromosome. Cell cultures, tissue, or whole blood were used to obtain chromosomes.

15        0.5 ml. of whole blood was added to RPMI 1640 and incubated 96 hours in a 5%CO<sub>2</sub>/37°C incubator. 0.05 ug/ml colcemide was added to the culture one hour before harvest. Cells were collected and washed in PBS. The suspension was incubated with a hypotonic solution of KCl added dropwise to reach a final volume of 5 ml. The cells were spun down and fixed by resuspending the cells in methanol and glacial acetic acid (3:1). The cell suspension was dropped onto glass slides and dried.

20        The slides were treated with RNase A and washed then dehydrated in a series of increasing concentrations of ethanol.

25        The EST to be localized was nick-translated using fluorescently labeled nucleotide (Korenberg, Jr., et al., Cell 53(3):391-400 (1988)). Following nick translation, unincorporated label was removed by spin dialysis through Sepharose. The probe was further extracted with phenol-chloroform to remove additional protein. The chromosomes were denatured in formamide using techniques known in the art and the denatured probe was added to the slides. Following hybridization, the cells were washed. The slides were studied under a fluorescent microscope. In addition, the chromosomes can be stained for G-banding or Q-banding using techniques known in the art.

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The resulting metaphase chromosomes had fluorescent tags localized to those regions of the chromosome that were homologous to the EST. Thus, a particular EST was localized to a particular region on a given chromosome. In this manner, SEQ ID NOs 396, 485, 506, 1880 and 1894 were mapped using fluorescent in situ hybridization to locations on chromosomes 17, 7, 10 and 1 respectively (See Table 4B below). For a review of the technique see Verma et al., *Human Chromosomes: A Manual of Basic Techniques*. Pergamon Press, NY (1988), which is hereby incorporated by reference.

Table 4: Precise Chromosomal Localization of ESTs

|    |    | SEQ ID | EST#     | Map Location     |
|----|----|--------|----------|------------------|
|    |    | -----  | -----    | -----            |
| 15 | A. | 19     | EST00023 | 6p               |
|    |    | 22     | EST00301 | 6p               |
|    |    | 1894   | EST01643 | 6p21             |
|    |    | 1      | EST00007 | 6q               |
|    |    | 224    | EST00356 | 6q               |
|    |    | 288    | EST00219 | 6q               |
| 20 |    | 162    | EST00133 | Xp11.21 - Xp21.2 |
|    |    | 1917   | EST01029 | Xp11.21 - Xp21.2 |
|    |    | 1669   | EST00827 | Xq26 - Xq27.1    |
|    |    | 1899   | EST01014 | Xq28             |
| 25 | B. | 1880   | EST01634 | 1q32             |
|    |    | 485    | EST01466 | 7p13             |
|    |    | 506    | EST01471 | 10q11.2          |
|    |    | 396    | EST01443 | 17q25            |

## EXAMPLE 8

Automated DNA Sequencing Accuracy

ESTs that match human sequences in GenBank are excellent tools for the analysis of the accuracy of double-strand automated DNA sequencing. Ninety EST/GenBank matches were examined for the number of nucleotide mismatches and gaps required to achieve optimal alignment by the Genetics Computer Group (GCG) program BESTFIT (Devereux et al, *Nucleic Acids Research* 12: 387 (1984)).

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The number of mismatches, insertions and deletions was counted for each hundred bases of the sequence (Table 5). As expected, the sequence quality was best closest to the primer and decreased rapidly after about 400 bases. The number of deletions and insertions relative to the GenBank reference sequence increased five- to ten-fold beyond 400 bases, while the number of mismatches doubled. The average accuracy rate for individual double-stranded sequencing runs was 97.7% to 400 bases.

TABLE 5. Accuracy Of Single-Run Double-Stranded Automated Sequencing

| <u>Bases from<br/>Primer</u> | <u>Mismatches/<br/>Ambiguities</u> <sup>+</sup> | <u>Gaps<br/>Insertions</u> <sup>+</sup> | <u>Percent<br/>Deletions</u> <sup>+</sup> | <u>Aligned<br/>Accurate</u> | <u>Bases</u> |
|------------------------------|-------------------------------------------------|-----------------------------------------|-------------------------------------------|-----------------------------|--------------|
| 101 - 200                    | 1.45                                            | 0.18                                    | 0.19                                      | 98.2                        | 8,800        |
| 201 - 300                    | 1.72                                            | 0.25                                    | 0.11                                      | 97.9                        | 8,130        |
| 301 - 400                    | 2.07                                            | 0.98                                    | 0.37                                      | 96.6                        | 5,404        |
| >400                         | 3.53                                            | 2.63                                    | 1.06                                      | 92.8                        | 3,197        |

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ESTs statistically identical to known human sequences and those matching mitochondrial and ribosomal genes were aligned with sequenced from GenBank using the GCG program BESTFIT. The first 85 nucleotides was polylinker sequence which was not aligned with the pBluescript SK reference sequence. Tabulation of errors began 15 bases into the BESTFIT alignment and thus is reported beginning with bases 101-200. <sup>+</sup>Error rates are reported as number of mismatches, insertions, or deletions per hundred aligned bases. "Mismatches" includes ambiguous base calls.

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## EXAMPLE 9

Probability of ESTs Containing Coding Sequences

5 The ESTs of the present invention were statistically  
evaluated using the coding-region prediction program CRM  
via the GRAIL server (Uberbacher, E. & Mural, R. Proc.  
Natl. Acad. Sci. USA, 88: 11261-5 (1991)). The CRM program  
uses a neural network to combine results from several  
different coding regions by looking at different 6 bp  
sequences found in coding exons and in introns. The  
10 program additionally conducts reading frame searches and  
assesses randomness at the third position of codons. This  
protocol categorizes sequences as having an excellent,  
good, marginal, or poor probability of containing coding  
regions. The results are reported in Tables 6-9. There  
15 were 219 ESTs categorized as "excellent" (Table 6); 120  
categorized as "good" (Table 7); 113 categorized as  
"marginal" (Table 8); and 1743 categorized as "poor" (Table  
9). These results indicate that most ESTs of the present  
invention comprise noncoding regions.

Table 6: ESTs with Excellent Probability of Containing Coding Sequence

| SEQ ID# | EST#     |         |          |         |          |
|---------|----------|---------|----------|---------|----------|
| 7       | EST00014 | 973     | EST01987 | 1807    | EST00941 |
| 15      | EST00020 | 979     | EST01993 | 1809    | EST00943 |
| 48      | EST00291 | 980     | EST01994 | 1820    | EST00951 |
| 62      | EST00064 | 986     | EST02000 | 1829    | EST00958 |
| 66      | EST00067 | 1000    | EST02014 | 1849    | EST00975 |
| 75      | EST00074 | 1004    | EST02018 | 1860    | EST00983 |
| 98      | EST00260 | 1007    | EST02021 | 1866    | EST00989 |
| 106     | EST00092 | 1018    | EST02032 | 1871    | EST00994 |
| 108     | EST00094 | 1021    | EST02035 | 1888    | EST01005 |
| 114     | EST00098 | 1034    | EST02050 | 1890    | EST01007 |
| 115     | EST00099 | 1047    | EST02063 | 1892    | EST01009 |
| 124     | EST00107 | 1090    | EST02109 | 1903    | EST01018 |
| 128     | EST00252 | 1096    | EST02115 | 1904    | EST01019 |
| 156     | EST00130 | 1115    | EST02135 | 1914    | EST01026 |
| 164     | EST00135 | 1118    | EST02138 | 1930    | EST01040 |
| 166     | EST00137 | 1129    | EST02149 | 1944    | EST01050 |
| 174     | EST00296 | 1133    | EST02153 | 1949    | EST01054 |
| 179     | EST00145 | 1141    | EST02163 | 1962    | EST01062 |
| 183     | EST00148 | 1163    | EST02187 | 1973    | EST01071 |
| 201     | EST00163 | 1183    | EST02208 | 1977    | EST01075 |
| 205     | EST00165 | 1243    | EST02272 | 1982    | EST01080 |
| 215     | EST00172 | 1264    | EST02293 | 1991    | EST01088 |
| 230     | EST00181 | 1265    | EST02294 | 1993    | EST01090 |
| 253     | EST00199 | 1266    | EST02295 | 2000    | EST01097 |
| 263     | EST00203 | 1287    | EST02317 | 2001    | EST01098 |
| 268     | EST00369 | 1308    | EST02338 | 2012    | EST01106 |
| 270     | EST00207 | 1324    | EST02354 | 2013    | EST01107 |
| 271     | EST00283 | 1344    | EST02374 | 2024    | EST01117 |
| 273     | EST00208 | 1356    | EST02386 | 2043    | EST01131 |
| 276     | EST00211 | 1365    | EST02396 | 2051    | EST01138 |
| 281     | EST00214 | 1383    | EST02415 | 2056    | EST01142 |
| 285     | EST00286 | 1399    | EST02433 | 2058    | EST01144 |
| 333     | EST00394 | 1401    | EST02435 | 2059    | EST01145 |
| 336     | EST00397 | 1405    | EST02439 | 2064    | EST01149 |
| 339     | EST00400 | 1417    | EST02452 | 2090    | EST01167 |
| 362     | EST00418 | 1451    | EST02487 | 2094    | EST01171 |
| 389     | EST00440 | 1457    | EST02493 | 2116    | EST01192 |
| 441     | EST00481 | 1463    | EST02500 | 2117    | EST01193 |
| 454     | EST00493 | 1473    | EST02510 | 2128    | EST01202 |
| 476     | EST00509 | 1479    | EST02516 | 2131    | EST01205 |
| 493     | EST00522 | 1516    | EST02555 | 2134    | EST01208 |
| 504     | EST00529 | 1528    | EST02569 | 2144    | EST01216 |
| 516     | EST00538 | 1531    | EST02572 | 2145    | EST01217 |
| 518     | EST00540 | 1544    | EST02586 | 2150    | EST01222 |
| 551     | EST01482 | 1551    | EST02593 | 2155    | EST01227 |
| 552     | EST00565 | 1558    | EST02601 | 2161    | EST01231 |
| 559     | EST00570 | 1561    | EST02604 | 2163    | EST01238 |
| 582     | EST00592 | 1581    | EST02625 | 2174    | EST01242 |
| 602     | EST00606 | 1586    | EST02631 | 2176    | EST01244 |
| 606     | EST00609 | 1591    | EST02636 | 2189    | EST01255 |
| 608     | EST00611 | 1616    | EST02661 | 2214    | EST01272 |
| 621     | EST00620 | 1624    | EST02670 | 2225    | EST01278 |
| 635     | EST00629 | 1630    | EST02676 | 2227    | EST01279 |
| 642     | EST00634 | 1637    | EST00796 | 2233    | EST01284 |
| 644     | EST00636 | 1639    | EST00799 | 2235    | EST01286 |
| 687     | EST00671 | 1649    | EST00808 | 2236    | EST01287 |
| 700     | EST00683 | 1651    | EST00810 | 2255    | EST01302 |
| 743     | EST00714 | 1677    | EST00835 | 2259    | EST01304 |
| 753     | EST00721 | 1682    | EST00839 | 2263    | EST01307 |
| 760     | EST00726 | 1694    | EST00849 |         |          |
| 764     | EST00729 | 1706    | EST00857 | SEQ ID# | EST#     |
| 808     | EST00761 | 1708    | EST00858 | 2267    | EST01756 |
| 823     | EST01864 | 1710    | EST00860 | 2281    | EST01321 |
| 834     | EST00771 | 1716    | EST00865 | 2283    | EST01322 |
| 886     | EST01886 |         |          | 2300    | EST01333 |
| 919     | EST01921 | SEQ ID# | EST#     | 2303    | EST01335 |
| 930     | EST01933 | 1718    | EST00867 | 2303    | EST01335 |
| 936     | EST01939 | 1731    | EST00879 | 2314    | EST01345 |
| 948     | EST01957 | 1742    | EST00887 | 2334    | EST01358 |
| 965     | EST01978 | 1746    | EST00891 | 2339    | EST01362 |
|         |          | 1760    | EST00903 | 2342    | EST01365 |
|         |          | 1767    | EST00907 | 2348    | EST01371 |
|         |          | 1769    | EST00909 | 2358    | EST01379 |
|         |          | 1777    | EST00913 | 2367    | EST01388 |



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Table 7: ESTs with Good Probability of Containing Coding Sequence

| <u>SEQ ID#</u> | <u>EST#</u> |                |             |      |          |
|----------------|-------------|----------------|-------------|------|----------|
| 20             | EST00024    | 1041           | EST02057    | 2362 | EST01383 |
| 72             | EST00071    | 1083           | EST02102    | 2378 | EST01397 |
| 82             | EST00078    | 1099           | EST02118    | 2399 | EST01423 |
| 88             | EST00084    | 1105           | EST02124    | 2407 | EST02714 |
| 137            | EST00272    | 1113           | EST02133    |      |          |
| 177            | EST00328    | 1139           | EST02161    |      |          |
| 193            | EST00156    | 1146           | EST02168    |      |          |
| 200            | EST00162    | 1196           | EST02221    |      |          |
| 218            | EST00175    | 1210           | EST02238    |      |          |
| 228            | EST00179    | 1233           | EST02262    |      |          |
| 247            | EST00279    | 1285           | EST02314    |      |          |
| 264            | EST00204    | 1331           | EST02361    |      |          |
| 267            | EST00297    | 1388           | EST02421    |      |          |
| 296            | EST00228    | 1418           | EST02453    |      |          |
| 371            | EST00426    | 1439           | EST02475    |      |          |
| 385            | EST00436    | 1502           | EST02540    |      |          |
| 392            | EST00442    | 1537           | EST02578    |      |          |
| 414            | EST00460    | 1563           | EST02606    |      |          |
| 433            | EST00474    | 1599           | EST02644    |      |          |
| 453            | EST00492    | 1602           | EST02647    |      |          |
| 471            | EST00505    | 1693           | EST00848    |      |          |
| 496            | EST00525    | 1695           | EST00850    |      |          |
| 524            | EST00544    | 1729           | EST00877    |      |          |
| 526            | EST00546    | 1730           | EST00878    |      |          |
| 529            | EST00549    | 1738           | EST00883    |      |          |
| 549            | EST00563    | 1739           | EST00885    |      |          |
| 557            | EST00569    | 1743           | EST00888    |      |          |
| 578            | EST00588    | 1768           | EST00908    |      |          |
| 596            | EST00602    | 1780           | EST00916    |      |          |
| 607            | EST00610    | 1804           | EST00938    |      |          |
| 619            | EST00619    | 1805           | EST00939    |      |          |
| 657            | EST00646    | 1811           | EST00945    |      |          |
| 660            | EST00649    | 1819           | EST00950    |      |          |
| 689            | EST00673    | 1826           | EST00956    |      |          |
| 695            | EST00679    | 1830           | EST00959    |      |          |
| 699            | EST00682    | 1845           | EST00971    |      |          |
| 729            | EST00703    | 1848           | EST00974    |      |          |
| 742            | EST00713    | 1853           | EST00977    |      |          |
| 747            | EST00717    | 1967           | EST01066    |      |          |
| 755            | EST00723    | 1992           | EST01089    |      |          |
| 759            | EST00725    | 1994           | EST01091    |      |          |
| 776            | EST00738    | <u>SEQ ID#</u> | <u>EST#</u> |      |          |
| 778            | EST00740    | 1997           | EST01094    |      |          |
| 782            | EST01551    | 2046           | EST01134    |      |          |
| 829            | EST00768    | 2101           | EST01177    |      |          |
| 835            | EST00772    | 2102           | EST01178    |      |          |
| 836            | EST00773    | 2105           | EST01181    |      |          |
| 862            | EST01872    | 2106           | EST01182    |      |          |
| 881            | EST01881    | 2141           | EST01213    |      |          |
| <u>SEQ ID#</u> | <u>EST#</u> | 2184           | EST01251    |      |          |
| 884            | EST01884    | 2196           | EST01260    |      |          |
| 924            | EST01926    | 2203           | EST01264    |      |          |
| 929            | EST01932    | 2232           | EST01283    |      |          |
| 938            | EST01941    | 2308           | EST01339    |      |          |
| 971            | EST01985    | 2345           | EST01368    |      |          |
| 995            | EST02009    | 2346           | EST01369    |      |          |
| 996            | EST02010    | 2351           | EST01373    |      |          |
| 1031           | EST02046    | 2354           | EST01375    |      |          |
|                |             | 2355           | EST01376    |      |          |
|                |             | 2359           | EST01380    |      |          |

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Table 8: ESTs with Marginal Probability of Containing Coding Sequence

| <u>SEQ ID#</u> | <u>EST#</u> |                |             |
|----------------|-------------|----------------|-------------|
| 11             | EST00018    | 1222           | EST02251    |
| 12             | EST00274    | 1224           | EST02253    |
| 24             | EST00027    | 1228           | EST02257    |
| 45             | EST00364    | 1267           | EST02296    |
| 79             | EST00076    | 1301           | EST02331    |
| 90             | EST00302    | 1397           | EST02431    |
| 110            | EST00096    | 1448           | EST02484    |
| 144            | EST00120    | 1480           | EST02517    |
| 145            | EST00121    | 1493           | EST02531    |
| 192            | EST00155    | 1499           | EST02537    |
| 222            | EST00177    | 1503           | EST02541    |
| 234            | EST00184    | 1527           | EST02568    |
| 277            | EST00212    | 1536           | EST02577    |
| 319            | EST00381    | 1548           | EST02590    |
| 368            | EST00423    | 1562           | EST02605    |
| 370            | EST00425    | 1572           | EST02615    |
| 387            | EST00438    | 1575           | EST02618    |
| 402            | EST00451    | 1595           | EST02640    |
| 415            | EST00461    | 1608           | EST02653    |
| 418            | EST00464    | 1610           | EST02655    |
| 426            | EST00470    | 1621           | EST02667    |
| 503            | EST00528    | 1627           | EST02674    |
| 517            | EST00539    | 1629           | EST02677    |
| 522            | EST00543    | 1631           | EST02678    |
| 532            | EST00551    | 1683           | EST00840    |
| 540            | EST00557    | 1692           | EST00847    |
| 570            | EST00580    | 1751           | EST00895    |
| 573            | EST00583    | 1756           | EST00900    |
| 576            | EST00586    | 1764           | EST02690    |
| 613            | EST00615    | 1770           | EST00910    |
| 617            | EST00617    | 1793           | EST00929    |
| 626            | EST00622    | 1847           | EST00973    |
| 681            | EST00665    | 1877           | EST00998    |
| 726            | EST00700    | 1897           | EST01012    |
| 727            | EST00701    | 1900           | EST01015    |
| 738            | EST00711    | 1939           | EST01655    |
| 745            | EST00715    | 1940           | EST01046    |
| 752            | EST00720    | 1954           | EST01058    |
| 791            | EST00746    | <u>SEQ ID#</u> | <u>EST#</u> |
| 795            | EST00749    | 1990           | EST01087    |
| 803            | EST00756    | 2008           | EST01103    |
| 845            | EST00777    | 2031           | EST01123    |
| 852            | EST00782    | 2041           | EST01130    |
| 854            | EST00784    | 2044           | EST01132    |
| 907            | EST01907    | 2060           | EST01146    |
| 912            | EST01912    | 2100           | EST01176    |
| 935            | EST01938    | 2136           | EST01210    |
| <u>SEQ ID#</u> | <u>EST#</u> | 2153           | EST01225    |
| 968            | EST01981    | 2204           | EST01265    |
| 985            | EST01999    | 2212           | EST01270    |
| 988            | EST02002    | 2248           | EST01297    |
| 1043           | EST02059    | 2250           | EST01299    |
| 1081           | EST02100    | 2266           | EST01310    |
| 1089           | EST02108    | 2309           | EST01340    |
| 1116           | EST02136    | 2347           | EST01370    |
| 1134           | EST02154    | 2388           | EST01406    |
| 1205           | EST02233    | 2398           | EST01422    |
|                |             | 2405           | EST01427    |

Table 9: ESTs with Poor Coding Probability

| SEQ ID# | EST#     | 103     | EST00317 | 204     | EST00235 | 309     | EST00174 | 404     | EST00453 |
|---------|----------|---------|----------|---------|----------|---------|----------|---------|----------|
| 1       | EST00007 | 104     | EST00354 | 206     | EST00166 | 315     | EST00008 | 405     | EST00454 |
| 2       | EST00009 | 105     | EST00365 | 207     | EST00167 | 316     | EST00378 | 406     | EST00455 |
| 3       | EST00010 | 107     | EST00093 | 209     | EST00331 | 317     | EST00379 | 407     | EST00456 |
| 4       | EST00011 | 109     | EST00095 | 210     | EST00168 | 318     | EST00380 | 408     | EST00457 |
| 5       | EST00012 | 111     | EST00281 | 211     | EST00332 | 320     | EST00382 | 409     | EST01444 |
| 6       | EST00013 | 112     | EST00318 | 212     | EST00169 | 321     | EST00383 | 410     | EST00458 |
| 8       | EST00234 | 113     | EST00097 | 213     | EST00170 | 322     | EST00384 | 411     | EST00459 |
| 10      | EST00016 | 116     | EST00100 | 214     | EST00171 | 323     | EST00385 | 412     | EST01445 |
| 14      | EST00019 | 117     | EST00319 | 216     | EST00173 | 325     | EST00386 | 416     | EST00462 |
| 16      | EST00021 | 118     | EST00101 | 219     | EST00176 | 326     | EST00387 | 417     | EST00463 |
| 17      | EST00022 | 119     | EST00102 | 220     | EST00372 | 327     | EST00388 | 419     | EST00465 |
| 18      | EST00373 | 120     | EST00103 | 221     | EST00359 | 328     | EST00389 | 420     | EST00466 |
| 19      | EST00023 | 121     | EST00104 | 224     | EST00356 | 329     | EST00390 | 421     | EST00467 |
| 21      | EST00025 | 122     | EST00105 | 225     | EST00178 | 330     | EST00391 | 422     | EST01447 |
| 23      | EST00026 | 123     | EST00106 | 226     | EST00333 | 331     | EST00392 | 423     | EST00468 |
| 25      | EST00028 | 125     | EST00108 | 229     | EST00180 | 332     | EST00393 | 424     | EST01448 |
| 27      | EST00029 | 126     | EST00109 | 231     | EST00334 | 334     | EST00395 | 425     | EST00469 |
| 28      | EST00030 | 127     | EST00320 | 232     | EST00182 | 335     | EST00396 | 427     | EST01449 |
| 29      | EST00031 | 129     | EST00321 | 233     | EST00183 | 337     | EST00398 | 428     | EST01451 |
| 30      | EST00032 | 130     | EST00355 | 235     | EST00185 | 340     | EST00402 | 429     | EST00471 |
| 31      | EST00033 | 131     | EST00322 | 236     | EST00186 | 341     | EST00403 | 431     | EST00473 |
| 32      | EST00233 | 133     | EST00111 | 237     | EST00187 | 342     | EST00404 | 432     | EST01452 |
| 33      | EST00034 | 134     | EST00375 | 238     | EST00188 | 344     | EST00405 | 434     | EST00475 |
| 34      | EST00035 | 135     | EST00112 | 239     | EST00189 | 345     | EST00406 | 435     | EST00476 |
| 35      | EST00036 | 136     | EST00113 | 240     | EST00335 | 347     | EST01829 | 436     | EST00477 |
| 36      | EST00037 | 138     | EST00114 | 241     | EST00191 | 348     | EST01830 | 437     | EST00478 |
| 39      | EST00039 | 139     | EST00116 | 242     | EST00192 | 349     | EST01831 | 438     | EST00479 |
| 40      | EST00040 | 140     | EST00117 | 243     | EST00193 | 350     | EST00407 | 439     | EST00480 |
| 41      | EST00041 | 141     | EST00118 | 244     | EST00194 | 351     | EST00408 | 440     | EST01454 |
| 42      | EST00042 | 142     | EST00323 | 245     | EST00347 | 352     | EST00409 | 442     | EST01456 |
| 46      | EST00044 | 143     | EST00119 | 246     | EST00196 | 353     | EST00410 | 443     | EST00482 |
| 47      | EST00046 | 146     | EST00122 | 250     | EST00197 | 354     | EST01433 | 444     | EST00483 |
| 49      | EST00047 | 147     | EST00292 | 252     | EST00198 | 355     | EST00411 | 446     | EST00485 |
| 50      | EST00048 | 148     | EST00236 | 254     | EST00200 | 356     | EST00412 | 447     | EST00486 |
| 51      | EST00049 | 149     | EST00123 | 255     | EST00201 | 357     | EST00413 | 448     | EST00487 |
| 52      | EST00052 | 150     | EST00124 | 256     | EST00345 | 358     | EST00414 | 449     | EST00488 |
| 53      | EST00054 | 151     | EST00125 | 257     | EST00337 | 359     | EST00415 | 450     | EST00489 |
| 54      | EST00055 | 152     | EST00126 | 259     | EST00202 | 360     | EST00416 | 451     | EST00490 |
| 55      | EST00056 | 153     | EST00127 | 260     | EST00357 | 361     | EST00417 | 452     | EST00491 |
| 56      | EST00057 | 154     | EST00128 | 261     | EST00338 | 363     | EST00419 | 455     | EST00494 |
| 57      | EST00058 | 155     | EST00129 | 262     | EST00339 | 364     | EST00420 | 457     | EST00495 |
| 58      | EST00059 | 157     | EST00131 | 265     | EST00205 | 365     | EST01434 | 458     | EST00496 |
| 59      | EST00061 | 158     | EST00132 | 266     | EST00206 | 366     | EST00421 | 459     | EST00497 |
| 60      | EST00062 | 159     | EST00325 | 272     | EST00340 | 367     | EST00422 | 460     | EST01457 |
| 63      | EST00065 | 160     | EST00326 | 274     | EST00268 | 369     | EST00424 | 461     | EST01836 |
| 64      | EST00066 | 162     | EST00133 | 275     | EST00209 | 372     | EST00427 | 462     | EST00498 |
| 67      | EST00351 | 163     | EST00134 | 278     | EST00342 | 373     | EST01832 | 464     | EST00499 |
| 68      | EST00068 | 165     | EST00136 | 279     | EST00213 | 374     | EST00428 | 465     | EST00500 |
| 69      | EST00360 | 167     | EST00138 | 280     | EST00343 | 375     | EST00429 | 466     | EST00501 |
| 71      | EST00070 | 168     | EST00140 | 283     | EST00215 | 376     | EST01436 | 467     | EST00502 |
| 73      | EST00072 | 169     | EST00141 | 284     | EST00216 | 377     | EST00430 | 468     | EST00503 |
| 74      | EST00073 | 170     | EST00295 | 286     | EST00217 | 378     | EST00431 | 470     | EST00504 |
| 76      | EST00075 | 171     | EST00327 | 287     | EST00218 | 379     | EST00432 | SEQ ID# | EST#     |
| 80      | EST00077 | 172     | EST00142 | 288     | EST00219 | 380     | EST01439 | 473     | EST00506 |
| 81      | EST00315 | 173     | EST00143 | 289     | EST00220 | 381     | EST00433 | 474     | EST00507 |
| 83      | EST00079 | 175     | EST00144 | 290     | EST00221 | 382     | EST00434 | 477     | EST01463 |
| 84      | EST00080 | 178     | EST00294 | 291     | EST00222 | SEQ ID# | EST#     | 478     | EST00510 |
| 85      | EST00081 | 182     | EST00329 | 292     | EST00223 | 383     | EST00435 | 479     | EST00511 |
| 86      | EST00082 | 184     | EST00149 | 293     | EST00224 | 384     | EST01440 | 480     | EST01464 |
| 87      | EST00083 | 185     | EST00150 | 294     | EST00225 | 386     | EST00437 | 481     | EST00512 |
| 89      | EST00085 | 186     | EST00151 | SEQ ID# | EST#     | 388     | EST00439 | 482     | EST01465 |
| 91      | EST00086 | 190     | EST00153 | 295     | EST00226 | 390     | EST01442 | 483     | EST00513 |
| 92      | EST00087 | 191     | EST00154 | 297     | EST00230 | 391     | EST00441 | 484     | EST00514 |
| 94      | EST00353 | 194     | EST00157 | 298     | EST00231 | 393     | EST00443 | 487     | EST00516 |
| 95      | EST00088 | SEQ ID# | EST#     | 302     | EST00303 | 395     | EST00445 | 488     | EST00517 |
| 96      | EST00089 | 195     | EST00158 | 303     | EST00348 | 397     | EST00446 | 489     | EST00518 |
| 99      | EST00316 | 196     | EST00159 | 304     | EST00307 | 398     | EST00447 | 490     | EST00519 |
| SEQ ID# | EST#     | 197     | EST00160 | 305     | EST00308 | 399     | EST00448 | 491     | EST00520 |
| 100     | EST00090 | 198     | EST00161 | 306     | EST00309 | 400     | EST00449 | 492     | EST00521 |
| 101     | EST00091 | 199     | EST00277 | 307     | EST00312 | 401     | EST00450 | 495     | EST00524 |
|         |          | 203     | EST00164 | 308     | EST00314 | 403     | EST00452 | 497     | EST00526 |

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|         |          |         |          |         |          |         |          |         |          |
|---------|----------|---------|----------|---------|----------|---------|----------|---------|----------|
| 498     | EST01467 | 600     | EST01492 | 697     | EST00680 | 799     | EST00752 | 894     | EST01894 |
| 499     | EST01468 | 601     | EST01493 | 698     | EST00681 | 800     | EST00753 | 895     | EST01895 |
| 500     | EST00527 | 603     | EST01494 | 701     | EST01522 | 801     | EST00754 | 896     | EST01896 |
| 501     | EST02715 | 604     | EST00607 | 702     | EST00684 | 804     | EST00757 | 897     | EST01897 |
| 502     | EST01469 | 605     | EST00608 | 703     | EST00685 | 805     | EST00758 | 898     | EST01898 |
| 507     | EST00530 | 609     | EST01496 | 704     | EST00686 | 806     | EST00759 | 899     | EST01899 |
| 508     | EST00531 | 610     | EST00612 | 705     | EST00687 | 807     | EST00760 | 900     | EST01900 |
| 509     | EST01472 | 611     | EST00613 | 706     | EST00688 | 809     | EST00762 | 901     | EST01901 |
| 510     | EST00532 | 612     | EST00614 | 708     | EST00689 | 810     | EST00763 | 902     | EST01902 |
| 511     | EST00533 | 615     | EST00616 | 709     | EST00690 | 811     | EST00764 | 903     | EST01903 |
| 512     | EST00534 | 616     | EST01497 | 710     | EST00691 | 813     | EST00765 | 904     | EST01904 |
| 513     | EST00535 | 618     | EST01498 | 711     | EST00692 | 814     | EST00766 | 905     | EST01905 |
| 514     | EST00536 | 620     | EST01499 | 712     | EST00693 | 815     | EST01855 | 906     | EST01906 |
| 515     | EST00537 | 622     | EST01843 | 713     | EST00694 | 816     | EST01856 | 908     | EST01908 |
| 519     | EST00541 | 623     | EST00621 | 714     | EST00695 | 817     | EST01857 | 909     | EST01909 |
| 520     | EST00542 | 624     | EST01500 | 715     | EST01523 | 818     | EST01858 | 910     | EST01910 |
| 521     | EST01474 | 625     | EST01844 | 716     | EST01524 | 819     | EST01859 | 911     | EST01911 |
| 523     | EST01838 | 627     | EST00623 | 717     | EST01525 | 820     | EST01860 | 914     | EST01914 |
| 525     | EST00545 | 628     | EST01503 | 718     | EST00696 | 822     | EST01863 | 915     | EST01915 |
| 527     | EST00547 | 629     | EST00624 | 719     | EST01526 | 825     | EST01866 | 916     | EST01917 |
| 528     | EST00548 | 630     | EST01505 | 720     | EST00697 | 826     | EST01867 | 917     | EST01919 |
| 530     | EST01477 | 631     | EST00625 | 721     | EST01527 | 827     | EST01558 | 918     | EST01920 |
| 531     | EST00550 | 632     | EST00626 | 722     | EST01528 | 828     | EST00767 | 920     | EST01922 |
| 533     | EST00552 | 633     | EST00627 | 723     | EST00698 | 830     | EST01559 | 921     | EST01923 |
| 534     | EST01478 | 634     | EST00628 | 725     | EST00699 | 831     | EST00769 | 922     | EST01924 |
| 535     | EST00553 | 636     | EST01507 | 728     | EST00702 | 832     | EST00770 | 923     | EST01925 |
| 536     | EST01479 | 637     | EST00630 | 730     | EST00704 | 837     | EST01561 | 925     | EST01927 |
| 537     | EST00554 | 638     | EST00631 | 731     | EST00705 | 838     | EST00774 | 926     | EST01929 |
| 538     | EST00555 | 640     | EST01509 | 732     | EST00706 | 839     | EST01562 | 927     | EST01930 |
| 539     | EST00556 | 641     | EST00633 | 733     | EST00707 | 840     | EST00775 | 928     | EST01931 |
| 541     | EST00558 | 643     | EST00635 | 734     | EST00708 | 841     | EST00776 | 931     | EST01934 |
| 542     | EST01480 | 645     | EST00637 | 735     | EST00709 | 842     | EST01563 | 932     | EST01935 |
| 543     | EST00559 | 646     | EST00638 | 736     | EST01532 | 843     | EST01564 | 933     | EST01936 |
| 544     | EST00560 | 647     | EST00639 | 737     | EST00710 | 844     | EST01565 | 934     | EST01937 |
| 545     | EST01481 | 648     | EST00640 | 739     | EST01534 | 846     | EST00778 | 937     | EST01940 |
| 547     | EST00561 | 649     | EST00641 | 740     | EST01535 | 847     | EST00779 | 939     | EST01943 |
| 548     | EST00562 | 651     | EST00643 | 741     | EST00712 | 848     | EST01566 | SEQ ID# | EST#     |
| 550     | EST00564 | 652     | EST01510 | 744     | EST00713 | 849     | EST01567 |         |          |
| 553     | EST00566 | 654     | EST00644 | 746     | EST00716 | 850     | EST00780 | 940     | EST01944 |
| 555     | EST01483 | 655     | EST00645 | 748     | EST01850 | 851     | EST00781 | 941     | EST01945 |
| 556     | EST00568 | 656     | EST01513 | 749     | EST00719 | SEQ ID# | EST#     | 942     | EST01947 |
| 558     | EST01484 | 658     | EST00647 | 750     | EST01539 |         |          | 943     | EST01948 |
| 560     | EST01485 | 659     | EST00648 | 751     | EST01540 | 853     | EST00783 | 944     | EST01949 |
| 561     | EST00571 | 661     | EST00650 | 754     | EST00722 | 855     | EST00785 | 945     | EST01950 |
| 562     | EST00572 | 662     | EST00651 | SEQ ID# | EST#     | 856     | EST01568 | 946     | EST01953 |
| 563     | EST00573 | 663     | EST00652 |         |          | 857     | EST01868 | 947     | EST01954 |
| 564     | EST00574 | 664     | EST00653 | 756     | EST01541 | 858     | EST01869 | 949     | EST01958 |
| 565     | EST00575 | 665     | EST00654 | 758     | EST00724 | 859     | EST01870 | 950     | EST01959 |
| 566     | EST00576 | SEQ ID# | EST#     | 761     | EST01544 | 860     | EST00786 | 953     | EST01962 |
| 567     | EST00577 |         |          | 762     | EST00727 | 861     | EST01871 | 954     | EST01963 |
| 568     | EST00578 | 666     | EST01514 | 763     | EST00728 | 863     | EST01873 | 956     | EST01968 |
| 569     | EST00579 | 667     | EST00655 | 765     | EST00730 | 864     | EST00787 | 957     | EST01969 |
| SEQ ID# | EST#     | 668     | EST00656 | 766     | EST00731 | 865     | EST01569 | 958     | EST01970 |
|         |          | 669     | EST00657 | 767     | EST00732 | 866     | EST01874 | 959     | EST01972 |
| 571     | EST00581 | 670     | EST00658 | 768     | EST00733 | 867     | EST01875 | 960     | EST01973 |
| 572     | EST00582 | 671     | EST00659 | 770     | EST00735 | 868     | EST01876 | 961     | EST01974 |
| 574     | EST00584 | 672     | EST00660 | 771     | EST01546 | 869     | EST00788 | 962     | EST01975 |
| 575     | EST00585 | 673     | EST01515 | 772     | EST00736 | 870     | EST00789 | 963     | EST01976 |
| 577     | EST00587 | 674     | EST01516 | 774     | EST01548 | 871     | EST00790 | 964     | EST01977 |
| 580     | EST00590 | 675     | EST00661 | 775     | EST00737 | 872     | EST00791 | 966     | EST01979 |
| 581     | EST00591 | 676     | EST00662 | 777     | EST00739 | 873     | EST00792 | 967     | EST01980 |
| 583     | EST00593 | 677     | EST00663 | 779     | EST00741 | 874     | EST00793 | 970     | EST01983 |
| 584     | EST00594 | 678     | EST01517 | 780     | EST01549 | 875     | EST00794 | 972     | EST01986 |
| 585     | EST00595 | 679     | EST01518 | 781     | EST01550 | 876     | EST00795 | 974     | EST01988 |
| 586     | EST00596 | 680     | EST00664 | 783     | EST01552 | 877     | EST01877 | 975     | EST01989 |
| 587     | EST01488 | 682     | EST00666 | 785     | EST01553 | 878     | EST01878 | 976     | EST01990 |
| 588     | EST00597 | 683     | EST00667 | 786     | EST00742 | 879     | EST01879 | 977     | EST01991 |
| 589     | EST00598 | 684     | EST00668 | 787     | EST00743 | 880     | EST01880 | 978     | EST01992 |
| 590     | EST00599 | 685     | EST00669 | 788     | EST00744 | 882     | EST01882 | 981     | EST01995 |
| 591     | EST01489 | 686     | EST00670 | 789     | EST00745 | 883     | EST01883 | 982     | EST01996 |
| 592     | EST00600 | 688     | EST00672 | 790     | EST01554 | 885     | EST01885 | 983     | EST01997 |
| 593     | EST00601 | 690     | EST00674 | 792     | EST00747 | 887     | EST01887 | 984     | EST01998 |
| 595     | EST01840 | 692     | EST00676 | 793     | EST00748 | 889     | EST01889 | 987     | EST02001 |
| 597     | EST00602 | 693     | EST00677 | 794     | EST01555 | 890     | EST01890 | 988     | EST02003 |
| 598     | EST00604 | 694     | EST00678 | 796     | EST00750 | 892     | EST01892 | 990     | EST02004 |
| 599     | EST00605 | 696     | EST01521 | 797     | EST00751 | 893     | EST01893 | 991     | EST02005 |

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|      |          |         |          |         |          |         |          |      |          |
|------|----------|---------|----------|---------|----------|---------|----------|------|----------|
| 992  | EST02006 | 1086    | EST02105 | 1184    | EST02209 | 1274    | EST02303 | 1363 | EST02394 |
| 994  | EST02008 | 1087    | EST02106 | 1185    | EST02210 | 1275    | EST02304 | 1364 | EST02395 |
| 997  | EST02011 | 1088    | EST02107 | 1186    | EST02211 | 1276    | EST02305 | 1366 | EST02397 |
| 999  | EST02013 | 1091    | EST02110 | 1187    | EST02212 | 1278    | EST02307 | 1367 | EST02398 |
| 1001 | EST02015 | 1093    | EST02112 | 1188    | EST02213 | 1279    | EST02308 | 1368 | EST02399 |
| 1002 | EST02016 | 1095    | EST02114 | 1189    | EST02214 | 1280    | EST02309 | 1370 | EST02401 |
| 1003 | EST02017 | 1097    | EST02116 | 1190    | EST02215 | 1281    | EST02310 | 1372 | EST02403 |
| 1005 | EST02019 | 1098    | EST02117 | 1191    | EST02216 | 1282    | EST02311 | 1373 | EST02404 |
| 1006 | EST02020 | 1100    | EST02119 | 1192    | EST02217 | 1283    | EST02312 | 1375 | EST02406 |
| 1008 | EST02022 | 1101    | EST02120 | 1193    | EST02218 | 1284    | EST02313 | 1376 | EST02407 |
| 1009 | EST02023 | 1102    | EST02121 | 1194    | EST02219 | 1286    | EST02316 | 1377 | EST02408 |
| 1010 | EST02024 | 1104    | EST02123 | 1195    | EST02220 | 1288    | EST02318 | 1378 | EST02409 |
| 1011 | EST02025 | 1106    | EST02125 | 1197    | EST02222 | 1289    | EST02319 | 1379 | EST02410 |
| 1012 | EST02026 | 1107    | EST02126 | 1198    | EST02223 | 1290    | EST02320 | 1380 | EST02411 |
| 1013 | EST02027 | 1108    | EST02127 | 1199    | EST02224 | 1291    | EST02321 | 1381 | EST02413 |
| 1014 | EST02028 | 1109    | EST02128 | 1200    | EST02226 | 1292    | EST02322 | 1382 | EST02414 |
| 1015 | EST02029 | 1110    | EST02129 | 1201    | EST02228 | 1293    | EST02323 |      |          |
| 1016 | EST02030 | 1111    | EST02131 | 1202    | EST02229 | 1294    | EST02324 |      |          |
| 1017 | EST02031 | 1112    | EST02132 | 1203    | EST02230 | 1295    | EST02325 |      |          |
| 1019 | EST02033 | 1114    | EST02134 | 1204    | EST02232 | 1296    | EST02326 |      |          |
| 1022 | EST02036 | 1117    | EST02137 | 1206    | EST02234 | SEQ ID# | EST#     |      |          |
| 1023 | EST02037 | 1119    | EST02139 | 1207    | EST02235 |         |          |      |          |
| 1024 | EST02038 | 1120    | EST02140 | 1208    | EST02236 | 1298    | EST02328 |      |          |
| 1025 | EST02040 | 1121    | EST02141 | 1209    | EST02237 | 1299    | EST02329 |      |          |
| 1026 | EST02041 | 1122    | EST02142 | SEQ ID# | EST#     | 1300    | EST02330 |      |          |
| 1027 | EST02042 | 1123    | EST02143 |         |          | 1302    | EST02332 |      |          |
| 1028 | EST02043 | 1124    | EST02144 | 1211    | EST02239 | 1303    | EST02333 |      |          |
| 1029 | EST02044 | 1125    | EST02145 | 1212    | EST02240 | 1304    | EST02334 |      |          |
| 1030 | EST02045 | SEQ ID# | EST#     | 1213    | EST02241 | 1305    | EST02335 |      |          |
| 1032 | EST02048 |         |          | 1214    | EST02242 | 1306    | EST02336 |      |          |
| 1033 | EST02049 | 1127    | EST02147 | 1215    | EST02244 | 1307    | EST02337 |      |          |
| 1036 | EST02052 | 1128    | EST02148 | 1216    | EST02245 | 1309    | EST02339 |      |          |
|      |          | 1130    | EST02150 | 1217    | EST02246 | 1310    | EST02340 |      |          |
|      |          | 1131    | EST02151 | 1218    | EST02247 | 1311    | EST02341 |      |          |
| 1037 | EST02053 | 1132    | EST02152 | 1219    | EST02248 | 1313    | EST02343 |      |          |
| 1038 | EST02054 | 1135    | EST02155 | 1220    | EST02249 | 1314    | EST02344 |      |          |
| 1040 | EST02056 | 1136    | EST02156 | 1221    | EST02250 | 1315    | EST02345 |      |          |
| 1042 | EST02058 | 1137    | EST02157 | 1223    | EST02252 | 1316    | EST02346 |      |          |
| 1044 | EST02060 | 1138    | EST02159 | 1225    | EST02254 | 1317    | EST02347 |      |          |
| 1045 | EST02061 | 1140    | EST02162 | 1226    | EST02255 | 1318    | EST02348 |      |          |
| 1046 | EST02062 | 1142    | EST02164 | 1227    | EST02256 | 1319    | EST02349 |      |          |
| 1048 | EST02064 | 1143    | EST02165 | 1232    | EST02261 | 1320    | EST02350 |      |          |
| 1049 | EST02065 | 1144    | EST02166 | 1234    | EST02263 | 1321    | EST02351 |      |          |
| 1050 | EST02066 | 1145    | EST02167 | 1235    | EST02264 | 1322    | EST02352 |      |          |
| 1051 | EST02067 | 1148    | EST02170 | 1236    | EST02265 | 1323    | EST02353 |      |          |
| 1052 | EST02068 | 1149    | EST02171 | 1237    | EST02266 | 1325    | EST02355 |      |          |
| 1053 | EST02069 | 1150    | EST02172 | 1238    | EST02267 | 1326    | EST02356 |      |          |
| 1054 | EST02070 | 1152    | EST02174 | 1239    | EST02268 | 1327    | EST02357 |      |          |
| 1055 | EST02071 | 1153    | EST02175 | 1240    | EST02269 | 1328    | EST02358 |      |          |
| 1056 | EST02072 | 1154    | EST02176 | 1241    | EST02270 | 1329    | EST02359 |      |          |
| 1057 | EST02073 | 1155    | EST02177 | 1242    | EST02271 | 1330    | EST02360 |      |          |
| 1058 | EST02074 | 1156    | EST02178 | 1244    | EST02273 | 1333    | EST02363 |      |          |
| 1059 | EST02075 | 1157    | EST02180 | 1246    | EST02275 | 1334    | EST02364 |      |          |
| 1060 | EST02076 | 1158    | EST02181 | 1247    | EST02276 | 1335    | EST02365 |      |          |
| 1061 | EST02078 | 1159    | EST02182 | 1248    | EST02277 | 1336    | EST02366 |      |          |
| 1062 | EST02079 | 1160    | EST02183 | 1249    | EST02278 | 1337    | EST02367 |      |          |
| 1063 | EST02081 | 1161    | EST02184 | 1250    | EST02279 | 1338    | EST02368 |      |          |
| 1064 | EST02082 | 1162    | EST02185 | 1251    | EST02280 | 1339    | EST02369 |      |          |
| 1065 | EST02083 | 1164    | EST02188 | 1252    | EST02281 | 1342    | EST02372 |      |          |
| 1066 | EST02084 | 1165    | EST02189 | 1253    | EST02282 | 1343    | EST02373 |      |          |
| 1067 | EST02085 | 1166    | EST02190 | 1254    | EST02283 | 1345    | EST02375 |      |          |
| 1068 | EST02086 | 1167    | EST02191 | 1255    | EST02284 | 1346    | EST02376 |      |          |
| 1070 | EST02088 | 1168    | EST02193 | 1256    | EST02285 | 1347    | EST02377 |      |          |
| 1071 | EST02089 | 1169    | EST02194 | 1257    | EST02286 | 1349    | EST02379 |      |          |
| 1072 | EST02090 | 1170    | EST02195 | 1258    | EST02287 | 1350    | EST02380 |      |          |
| 1073 | EST02091 | 1171    | EST02196 | 1259    | EST02288 | 1351    | EST02381 |      |          |
| 1074 | EST02092 | 1172    | EST02197 | 1260    | EST02289 | 1352    | EST02382 |      |          |
| 1075 | EST02093 | 1173    | EST02198 | 1261    | EST02290 | 1353    | EST02383 |      |          |
| 1076 | EST02094 | 1174    | EST02199 | 1262    | EST02291 | 1354    | EST02384 |      |          |
| 1077 | EST02096 | 1175    | EST02200 | 1263    | EST02292 | 1355    | EST02385 |      |          |
| 1078 | EST02097 | 1176    | EST02201 | 1268    | EST02297 | 1357    | EST02387 |      |          |
| 1079 | EST02098 | 1177    | EST02202 | 1269    | EST02298 | 1358    | EST02388 |      |          |
| 1080 | EST02099 | 1178    | EST02203 | 1270    | EST02299 | 1359    | EST02390 |      |          |
| 1082 | EST02101 | 1179    | EST02204 | 1271    | EST02300 | 1360    | EST02391 |      |          |
| 1084 | EST02103 | 1180    | EST02205 | 1272    | EST02301 | 1361    | EST02392 |      |          |
| 1085 | EST02104 | 1182    | EST02207 | 1273    | EST02302 | 1362    | EST02393 |      |          |





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| <u>SEQ ID#</u> | <u>EST#</u> |
|----------------|-------------|
| 2389           | EST01407    |
| 2391           | EST01415    |
| 2392           | EST01416    |
| 2395           | EST01419    |
| 2397           | EST01421    |
| 2401           | EST01424    |
| 2403           | EST01425    |
| 2404           | EST01426    |
| 2406           | EST02713    |
| 2409           | EST00273    |



## EXAMPLE 10

Functional Groupings of ESTs and Corresponding Genes

By matching new human ESTs to known sequences from other species, the apparent function of the gene corresponding to the EST can be ascertained. The data generated in Example 3 and 4 have been used to categorize 127 of the ESTs of the present invention, and their corresponding genes, into predicted functional groups. (These 127 are ESTs with database matches to sequences from other species for which a function was known.) Two different grouping schemes have been used.

The first scheme separates the sequences into three broad categories: metabolic; regulatory; and structural. These groupings are set out in Table 10.

The second grouping scheme separates the sequences into 13 specific categories: cell surface proteins; developmental control; energy metabolism; kinases and phosphatases; oncogenes; other metabolism-related polypeptides; peptidases and peptidase inhibitors; receptors; structural and cytoskeletal; signal transduction; transporters; transcription, translation, and subcellular localization; and transcription factors. These groupings are set out in Table 11.

Table 10: Thre -Class Functional Groupings of ESTs

| SEQ ID | EST#     | Group | Putative Identification                                 |
|--------|----------|-------|---------------------------------------------------------|
| -----  |          |       |                                                         |
| 1834   | EST01620 | M     | AMP deaminase, brain                                    |
| 97     | EST00289 | M     | Aconitase                                               |
| 691    | EST00675 | M     | Alcohol dehydrogenase                                   |
| 2092   | EST01700 | M     | Anion exchanger homolog AE3                             |
| 396    | EST01443 | M     | CDPdiacylglycerol-serine O-phosphatidyltransferase      |
| 1956   | EST01663 | M     | Ca <sup>2+</sup> -transporting ATPase 2                 |
| 1039   | EST02055 | M     | Calcium channel                                         |
| 2192   | EST01257 | M     | Diacylglycerol kinase, lymphocyte                       |
| 1441   | EST02477 | M     | Diamine acetyltransferase                               |
| 2289   | EST01325 | M     | Fatty acid synthase                                     |
| 310    | EST00377 | M     | Fo ATPase beta subunit, mitochondrial                   |
| 1667   | EST00825 | M     | Gamma-aminobutyric acid transporter                     |
| 1412   | EST02446 | M     | Glutamate-aspartate carrier protein                     |
| 1020   | EST02034 | M     | Glutaminase                                             |
| 2326   | EST01791 | M     | Inositol-1,4,5-trisphosphate 3-kinase                   |
| 2173   | EST01724 | M     | Lon protease                                            |
| 1427   | EST02463 | M     | Long-chain-fatty-acid-CoA ligase                        |
| 2226   | EST01744 | M     | NAD(P) <sup>+</sup> transhydrogenase (B-specific)       |
| 1566   | EST02609 | M     | Neutrophil oxidase factor                               |
| 1681   | EST01573 | M     | Nucleoside diphosphate kinase                           |
| 2254   | EST01751 | M     | Phosphatidylinositol-4,5-bisphosphate phosphodiesterase |
| 93     | EST00287 | M     | Processing enhancing protein                            |
| 2297   | EST01775 | M     | Prohormone cleavage enzyme                              |
| 9      | EST00376 | M     | Prolyl endopeptidase                                    |
| 1654   | EST01572 | M     | Protochlorophyllide reductase                           |
| 38     | EST00374 | M     | RNA polymerase II 6th subunit (RPO26)                   |
| 1715   | EST01583 | M     | Ribosomal protein L18a                                  |
| 1856   | EST01627 | M     | Ribosomal protein L1a                                   |
| 1974   | EST01667 | M     | Ribosomal protein L3                                    |
| 301    | EST00300 | M     | Ribosomal protein L30                                   |
| 22     | EST00301 | M     | Ribosomal protein S10                                   |
| 2402   | EST01826 | M     | Ribosomal protein S10                                   |
| 463    | EST01459 | M     | Ribosomal protein YL10                                  |
| 2073   | EST01697 | M     | Succinate dehydrogenase flavoprotein                    |
| 2138   | EST01715 | M     | Succinate dehydrogenase flavoprotein                    |
| 1771   | EST01601 | M     | Thiosulfate sulfurtransferase (rhodanese)               |
| 2121   | EST01711 | M     | Valine-tRNA ligase                                      |
| 1726   | EST01588 | M     | XPR2 alkaline extracellular protease                    |
| 913    | EST01913 | M     | Clathrin coat assembly protein AP50 homolog             |
| 1035   | EST02051 | M     | J1 protein                                              |
| 969    | EST01982 | R     | ADP-ribosylation factor 1                               |
| 1126   | EST02146 | R     | Calbindin D28                                           |
| 1910   | EST01645 | R     | Calmodulin                                              |
| 485    | EST01466 | R     | Calmodulin-dependent protein kinase, type II, beta      |
| 2302   | EST01779 | R     | Discs-large tumor suppressor                            |
| 188    | EST00256 | R     | Enhancer of split                                       |
| 1229   | EST02258 | R     | KUP protein                                             |
| 993    | EST02007 | R     | Kinase 5 protein                                        |
| 2282   | EST01764 | R     | Lamin B receptor                                        |
| SEQ ID | EST#     | Group | Putative Identification                                 |
| -----  |          |       |                                                         |
| 161    | EST00247 | R     | MARCKS (myristoylated alanine-rich protein kinase)      |
| 769    | EST00734 | R     | MARCKS homolog                                          |
| 1386   | EST02418 | R     | MARCKS homolog                                          |
| 227    | EST00259 | R     | Notch/Xotch                                             |
| 952    | EST01961 | R     | Notch/Xotch                                             |
| 1395   | EST02429 | R     | Nuclear factor 1-like protein (NF1)                     |
| 2353   | EST01806 | R     | Prohibitin                                              |
| 1069   | EST02087 | R     | Protein kinase C, zeta                                  |
| 1933   | EST01650 | R     | Protein phosphatase 2A beta subunit                     |

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|        |          |       |                                                  |
|--------|----------|-------|--------------------------------------------------|
| 202    | EST00298 | R     | Protein-tyrosine phosphatase LRP                 |
| 1478   | EST02515 | R     | Rab5                                             |
| 1408   | EST02442 | R     | Seven in absentia                                |
| 300    | EST00232 | R     | Transforming protein (dbl)                       |
| 1147   | EST02169 | R     | Tyrosine kinase                                  |
| 1348   | EST02378 | R     | cAMP-dependent protein kinase inhibitor          |
| 1931   | EST01041 | R     | cAMP-regulated phosphoprotein                    |
| 1413   | EST02447 | R     | cAMP-specific phosphodiesterase                  |
| 37     | EST00038 | R     | ras p21-like small GTP-binding protein (smg GDS) |
| 102    | EST00248 | R     | rho H12/ ARH12                                   |
| 299    | EST00249 | R     | smg p25A GDP dissociation inhibitor              |
| 189    | EST00282 | R     | trkB                                             |
| 1332   | EST02362 | R     | GA binding protein, beta subunit                 |
| 1277   | EST02306 | R     | Bib protein                                      |
| 43     | EST00371 | R     | Maternal G10 protein                             |
| 1704   | EST01580 | R     | Myeloid differentiation primary response gene My |
| 346    | EST01828 | R     | Otd homeotic protein                             |
| 187    | EST00152 | R     | Wilm's tumor-related protein                     |
| 249    | EST00275 | R     | Zinc Finger Proteins                             |
| 413    | EST01446 | R     | Zinc Finger Proteins                             |
| 469    | EST01460 | R     | Zinc Finger Proteins                             |
| 833    | EST01560 | R     | Zinc Finger Proteins                             |
| 1230   | EST02259 | R     | Zinc finger proteins                             |
| 1496   | EST02534 | R     | Zinc finger proteins                             |
| 2324   | EST01352 | R     | Zinc Finger Proteins                             |
| 208    | EST00250 | S     | 60K filarial antigen                             |
| 2320   | EST01784 | S     | 60K filarial antigen                             |
| 251    | EST00370 | S     | Actin, other                                     |
| 2146   | EST01218 | S     | Actin, other                                     |
| 248    | EST00271 | S     | Actinin, alpha                                   |
| 891    | EST01891 | S     | Actinin, alpha                                   |
| 1500   | EST02538 | S     | Actinin, alpha                                   |
| 132    | EST00110 | S     | Agrin                                            |
| 1852   | EST01625 | S     | Agrin                                            |
| 1965   | EST01664 | S     | Amyloid A4                                       |
| 2068   | EST01694 | S     | Amyloid A4                                       |
| 2408   | EST00244 | S     | Amyloid A4                                       |
| 1880   | EST01634 | S     | Axonal glycoprotein TAG-1                        |
| 2004   | EST01676 | S     | Cofilin                                          |
| 650    | EST00642 | S     | Dilute (myosin heavy chain)                      |
| 2217   | EST01738 | S     | Gelation factor ABP-280                          |
| 1885   | EST01639 | S     | Histocompatibility antigen modifier 1            |
| 77     | EST00257 | S     | Kinesin                                          |
| SEQ ID | EST#     | Group | Putative Identification                          |
| 78     | EST00258 | S     | Kinesin                                          |
| 2245   | EST01748 | S     | Kinesin                                          |
| 313    | EST00276 | S     | Lysosomal membrane glycoprotein i (LAMP-1)       |
| 223    | EST00368 | S     | Microtubule-associated protein 1B                |
| 824    | EST01865 | S     | Microtubule-associated protein 1B                |
| 2032   | EST01683 | S     | Microtubule-associated protein 1B                |
| 2017   | EST01678 | S     | Milk fat globule membrane protein                |
| 1567   | EST02610 | S     | Neural cell adhesion molecule L1                 |
| 506    | EST01471 | S     | Neuraxin                                         |
| 2368   | EST01389 | S     | Radial spoke protein 3                           |
| 951    | EST01960 | S     | Spectrin, beta                                   |
| 2089   | EST01699 | S     | Sperm membrane protein                           |
| 653    | EST01512 | S     | Tubulin, alpha                                   |
| 311    | EST00270 | S     | Tubulin, beta                                    |
| 594    | EST01490 | S     | Tubulin, beta                                    |
| 757    | EST01542 | S     | Tubulin, beta                                    |
| 1245   | EST02274 | S     | Tubulin, beta                                    |
| 1589   | EST02634 | S     | Tubulin, beta                                    |
| 1468   | EST02505 | S     | Matrin 3                                         |

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|      |          |   |         |
|------|----------|---|---------|
| 1371 | EST02402 | S | Talin   |
| 1701 | EST00853 | S | Unc-104 |

Group Key: M: Metabolic, R: Regulatory, S: Structural

Table 11: Thirteen-Class Functional Groupings of ESTs

| <u>SEQ ID</u> | <u>EST#</u> | <u>Group</u> | <u>Putative Identification</u>                     |
|---------------|-------------|--------------|----------------------------------------------------|
| 208           | EST00250    | CS           | 60K filarial antigen                               |
| 2320          | EST01784    | CS           | 60K filarial antigen                               |
| 1965          | EST01664    | CS           | Amyloid A4                                         |
| 2068          | EST01694    | CS           | Amyloid A4                                         |
| 2408          | EST00244    | CS           | Amyloid A4                                         |
| 1880          | EST01634    | CS           | Axonal glycoprotein TAG-1                          |
| 1885          | EST01639    | CS           | Histocompatibility antigen modifier 1              |
| 313           | EST00276    | CS           | Lysosomal membrane glycoprotein 1 (LAMP-1)         |
| 2017          | EST01678    | CS           | Milk fat globule membrane protein                  |
| 1567          | EST02610    | CS           | Neural cell adhesion molecule L1                   |
| 2368          | EST01389    | CS           | Radial spoke protein 3                             |
| 2089          | EST01699    | CS           | Sperm membrane protein                             |
| 1277          | EST02306    | DC           | Bib protein                                        |
| 188           | EST00256    | DC           | Enhancer of split                                  |
| 43            | EST00371    | DC           | Maternal G10 protein                               |
| 1704          | EST01580    | DC           | Myeloid differentiation primary response gene MyD1 |
| 227           | EST00259    | DC           | Notch/Xotch                                        |
| 952           | EST01961    | DC           | Notch/Xotch                                        |
| 346           | EST01828    | DC           | Orthodentical homeotic protein                     |
| 1408          | EST02442    | DC           | Seven in absentia                                  |
| 97            | EST00289    | EM           | Aconitase                                          |
| 310           | EST00377    | EM           | Fo ATPase beta subunit, mitochondrial              |
| 485           | EST01466    | KP           | Calmodulin-dependent protein kinase, type II, beta |
| 993           | EST02007    | KP           | Kinase 5 protein                                   |
| 1069          | EST02087    | KP           | Protein kinase C, zeta                             |
| 1933          | EST01650    | KP           | Protein phosphatase 2A beta subunit                |
| 202           | EST00298    | KP           | Protein-tyrosine phosphatase LRP                   |
| 1348          | EST02378    | KP           | cAMP-dependent protein kinase inhibitor            |
| 2302          | EST01779    | OG           | Discs-large tumor suppressor                       |
| 2353          | EST01806    | OG           | Prohibitin                                         |
| 1478          | EST02515    | OG           | Rab5                                               |
| 300           | EST00232    | OG           | Transforming protein (dbl)                         |
| 37            | EST00038    | OG           | ras p21-like small GTP-binding protein (smg GDS)   |
| 102           | EST00248    | OG           | rho H12/ ARH12                                     |
| 1834          | EST01620    | OM           | AMP deaminase, brain                               |
| 691           | EST00675    | OM           | Alcohol dehydrogenase                              |
| 396           | EST01443    | OM           | CDPdiacylglycerol-serine O-phosphatidyltransferase |
| 2192          | EST01257    | OM           | Diacylglycerol kinase, lymphocyte                  |
| 1441          | EST02477    | OM           | Diamine acetyltransferase                          |
| 2289          | EST01325    | OM           | Fatty acid synthase                                |
| 1020          | EST02034    | OM           | Glutaminase                                        |
| 2326          | EST01791    | OM           | Inositol-1,4,5-trisphosphate 3-kinase              |
| 1427          | EST02463    | OM           | Long-chain-fatty-acid-CoA ligase                   |
| 2226          | EST01744    | OM           | NAD(P)+ transhydrogenase (B-specific)              |
| 1566          | EST02609    | OM           | Neutrophil oxidase factor                          |
| 1681          | EST01573    | OM           | Nucleoside diphosphate kinase                      |

| <u>SEQ ID</u> | <u>EST#</u> | <u>Group</u> | <u>Putative Identification</u>                          |
|---------------|-------------|--------------|---------------------------------------------------------|
| 2254          | EST01751    | OM           | Phosphatidylinositol-4,5-bisphosphate phosphodiesterase |
| 1654          | EST01572    | OM           | Protochlorophyllide reductase                           |
| 2073          | EST01697    | OM           | Succinate dehydrogenase flavoprotein                    |
| 2138          | EST01715    | OM           | Succinate dehydrogenase flavoprotein                    |
| 1771          | EST01601    | OM           | Thiosulfate sulfurtransferase (rhodanese)               |
| 2173          | EST01724    | PI           | Lon protease                                            |
| 2297          | EST01775    | PI           | Prohormone cleavage enzyme                              |
| 9             | EST00376    | PI           | Prolyl endopeptidase                                    |
| 1726          | EST01588    | PI           | XPR2 alkaline extracellular protease                    |
| 1147          | EST02169    | PP           | Tyrosine kinase                                         |
| 2282          | EST01764    | RT           | Lamin B receptor                                        |
| 189           | EST00282    | RT           | trkB                                                    |
| 251           | EST00370    | SC           | Actin, other                                            |
| 2146          | EST01218    | SC           | Actin, other                                            |
| 248           | EST00271    | SC           | Actinin, alpha                                          |
| 891           | EST01891    | SC           | Actinin, alpha                                          |
| 1500          | EST02538    | SC           | Actinin, alpha                                          |
| 132           | EST00110    | SC           | Agrin                                                   |
| 1852          | EST01625    | SC           | Agrin                                                   |
| 2004          | EST01676    | SC           | Cofilin                                                 |
| 650           | EST00642    | SC           | Dilute (myosin heavy chain)                             |
| 2217          | EST01738    | SC           | Gelation factor ABP-280                                 |
| 77            | EST00257    | SC           | Kinesin                                                 |
| 78            | EST00258    | SC           | Kinesin                                                 |
| 2245          | EST01748    | SC           | Kinesin                                                 |
| 1468          | EST02505    | SC           | Matrin 3                                                |
| 223           | EST00368    | SC           | Microtubule-associated protein 1B                       |
| 824           | EST01865    | SC           | Microtubule-associated protein 1B                       |
| 2032          | EST01683    | SC           | Microtubule-associated protein 1B                       |
| 506           | EST01471    | SC           | Neuraxin                                                |
| 951           | EST01960    | SC           | Spectrin, beta                                          |
| 1371          | EST02402    | SC           | Talin                                                   |
| 653           | EST01512    | SC           | Tubulin, alpha                                          |
| 311           | EST00270    | SC           | Tubulin, beta                                           |
| 594           | EST01490    | SC           | Tubulin, beta                                           |
| 757           | EST01542    | SC           | Tubulin, beta                                           |
| 1245          | EST02274    | SC           | Tubulin, beta                                           |
| 1589          | EST02634    | SC           | Tubulin, beta                                           |
| 1701          | EST00853    | SC           | Unc-104                                                 |
| 969           | EST01982    | ST           | ADP-ribosylation factor 1                               |
| 1126          | EST02146    | ST           | Calbindin D28                                           |
| 1910          | EST01645    | ST           | Calmodulin                                              |
| 161           | EST00247    | ST           | MARCKS (myristoylated alanine-rich protein kinase)      |
| 769           | EST00734    | ST           | MARCKS homolog                                          |
| 1386          | EST02418    | ST           | MARCKS homolog                                          |
| 1931          | EST01041    | ST           | cAMP-regulated phosphoprotein                           |
| 1413          | EST02447    | ST           | cAMP-specific phosphodiesterase                         |
| 299           | EST00249    | ST           | smg p25A GDP dissociation inhibitor                     |

| <u>SEQ ID</u> | <u>EST#</u> | <u>Group</u> | <u>Putative Identification</u>              |
|---------------|-------------|--------------|---------------------------------------------|
| 2092          | EST01700    | TP           | Anion exchanger homolog AE3                 |
| 1956          | EST01663    | TP           | Ca <sup>2+</sup> -transporting ATPase 2     |
| 1039          | EST02055    | TP           | Calcium channel                             |
| 1667          | EST00825    | TP           | Gamma-aminobutyric acid transporter         |
| 1412          | EST02446    | TP           | Glutamate-aspartate carrier protein         |
| 913           | EST01913    | TT           | Clathrin coat assembly protein AP50 homolog |
| 1035          | EST02051    | TT           | J1 protein                                  |
| 93            | EST00287    | TT           | Processing enhancing protein                |
| 38            | EST00374    | TT           | RNA polymerase II 6th subunit (RPO26)       |
| 1715          | EST01583    | TT           | Ribosomal protein L18a                      |
| 1856          | EST01627    | TT           | Ribosomal protein L1a                       |
| 1974          | EST01667    | TT           | Ribosomal protein L3                        |
| 301           | EST00300    | TT           | Ribosomal protein L30                       |
| 22            | EST00301    | TT           | Ribosomal protein S10                       |
| 2402          | EST01826    | TT           | Ribosomal protein S10                       |
| 463           | EST01459    | TT           | Ribosomal protein YL10                      |
| 2121          | EST01711    | TT           | Valine-tRNA ligase                          |
| 1332          | EST02362    | TX           | GA binding protein, beta subunit            |
| 1229          | EST02258    | TX           | KUP protein                                 |
| 1395          | EST02429    | TX           | Nuclear factor 1-like protein (NF1)         |
| 187           | EST00152    | TX           | Wilm's tumor-related protein                |
| 249           | EST00275    | TX           | Zinc Finger Proteins                        |
| 413           | EST01446    | TX           | Zinc Finger Proteins                        |
| 469           | EST01460    | TX           | Zinc Finger Proteins                        |
| 833           | EST01560    | TX           | Zinc Finger Proteins                        |
| 1230          | EST02259    | TX           | Zinc finger proteins                        |
| 1496          | EST02534    | TX           | Zinc finger proteins                        |
| 2324          | EST01352    | TX           | Zinc Finger Proteins                        |

Group Key: CS: Cell Surface, DC: Developmental Control, EM: Energy Metabolism, KP: Kinases and Phosphatases, OG: Oncogenes, OM: Other Metabolism, PI, Peptidases and Peptidase Inhibitors, RT: Receptors, SC: Structural and Cytoskeletal, ST: Signal Transduction, TP: Transporters, TT: Transcription, Translation, and Subcellular Localization, TX: Transcription Factors.

## EXAMPLE 11

cDNA Libraries Generated From Specific Genomic DNA  
by Exon Expression & Amplification

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Exon amplification was used to express potential exons from genomic DNA in a recombinant vector that contains some of the signals necessary for splicing. If an exon is present in the proper orientation in the vector, that exon will be spliced in a mammalian cell and will become part of the mRNA of that cell. The exon splice-product can be purified from other mRNA in the cell by conversion of the mRNA to cDNA and selective amplification of the recombinant splice-product cDNAs. Cosmid DNA from human chromosome 19q13.3 was digested with BamHI or BamHI/BglII restriction enzymes. The fragments generated were collected and size specifically cloned into an expression vector (Buckler, et al. Proc. Nat'l. Acad. Sci. USA, 88:4005-4009 (1991)). After transfection by electroporation of these constructs into COS cells, RNA transcripts were generated using the SV40 early promoter and a polyadenylation signal derived from SV40 both present in the expression vector. When a fragment of genomic DNA contains an entire exon with flanking intron sequence in the sense orientation, the exon should be retained in the mature poly(A)+ cytoplasmic RNA. Therefore, the mRNA was used as template for cDNA synthesis using reverse transcriptase and vector-priming. Subsequently, the cDNAs were amplified by vector-priming using PCR. A fraction of this first PCR product was reamplified using internal vector-primers containing terminal cloning sites. These products were end-repaired with T4 DNA polymerase, digested with the appropriate restriction enzymes, gel purified and cloned into pBluescript vectors. The constructs were transfected into XL1-Blue competent cells and plated on LB/X-gal/IPTG/ampicillin plates. White colonies were selected and expanded to prepare DNA templates as described in Example 2.



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When multiple cosmids or YAC clones were used as the source DNA, a pool of specific expressed exons was obtained as a cDNA library. The EST/cDNAs sequenced from this specific library are disclosed herein as SEQ ID NOS: 2412-2417.

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## EXAMPLE 12

### PCR Amplification from Predicted Exons

10 Computational analyses can be applied to genomic DNA sequences to predict protein coding regions. The coding region prediction program CRM (E. Uberbacher and R. Mural, Proc. Natl. Acad. Sci. USA 88:11261-5 (1991)) finds open reading frames and classifies them according to their probability of being coding regions. These regions are subsequently examined using the GM program (C. Fields and C. Soderlund, Comp. Applic. Biosci. 6: 263, 1990), which predicts intron-exon structure. PCR primers are then designed to amplify the predicted exons and used to test human cDNA libraries (for example, fetal brain or placental libraries) for the presence of these putative exons using a PCR assay.

20 This strategy has been successfully applied in two large scale genomic sequencing projects, the Huntington's locus of human chromosome 4p16.3 (McCombie, et al., submitted) and human chromosome locus 19q13.3 (Martin-Gallardo, et al., submitted). Sequences from eleven predicted exons from chromosome 4 were present in tested cDNA libraries, indicating that this region has at least two and probably three expressed genes. In one case, the method resulted in an amplification product which spanned two predicted exons. (SEQ ID NO: 2411.) When sequenced, this PCR product indicated the presence of the two exons from which the primers were initially chosen, as well as an intervening exon which was also predicted by the CRM program, but not the intervening genomic sequences. In a similar fashion, the presence of the two predicted genes in the chromosome 19

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sequence was confirmed by sequencing PCR products. SEQ ID NO 2410, includes a partial exon of one of these genes.

### EXAMPLE 13

#### 5                    Complete Sequence of EST Clone Inserts

There are a number of methods known to those with skill in the art of molecular biology, to obtain sequence information from the cDNAs corresponding to the EST sequences. Procedures for these methods are provided in 10 Basic Methods in Molecular Biology (David et al. *supra*). One way to acquire more information about the cDNA from which an EST was derived is to sequence the remainder of the cDNA clone. The complete sequence of the inserts of four EST 15 clones (representing SEQ ID NOs 188, 189, 223, and 227) was determined using Exonuclease III deletions. Briefly, EST clones were digested with the restriction enzymes SalI and KpnI or PstI and BamHI (for deletions from the Forward primer and Reverse primer ends of the insert, respectively). The 20 KpnI and PstI enzymes leave 3' sticky ends following digestion, which Exonuclease III is unable to bind. This results in unidirectional deletions into the cDNA insert leaving the vector sequence undisturbed. After addition of Exonuclease III to the Forward and Reverse deletion 25 reactions, aliquots of the reaction were removed at defined time intervals and the reaction was stopped to prevent further deletion. S1 nuclease and Klenow DNA polymerase were added to create blunt ended fragments suitable for ligation.

Samples for each time point was purified by 30 electrophoresis through an agarose gel and religated. Two to four representative clones from each time point in each direction were sequenced to give between 200 and 400 base pairs of sequence data. Careful selection of deletion conditions and time points allow a deletion series of 35 approximately 100-200 base pairs difference in length at each consecutive time point. Sequence fragments were reassembled into a redundant contiguous sequence using the INHERIT

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software from Applied Biosystems, Inc. (Foster City, CA). In this way, the complete insert from these four cDNA clones was sequenced on both strands to an average redundancy between three and four (each base was sequenced between three and four times, on average). Those complete insert sequences are disclosed herein as SEQ ID 2418, 2419, 2420, and 2421, corresponding to original ESTs with SEQ ID 223, 189, 227, and 188, respectively.

#### EXAMPLE 14

##### Determining Reading Frame, Orientation, Coding Regions: ESTs and Complete cDNA Sequences

Once the complete cDNA sequence has been determined in accordance with Example 13, the reading frame, orientation, and coding regions are determined by computer techniques. (The complete coding region is considered to be the largest open reading frame from a methionine to a stop codon.)

Specifically, the CRM program on the GRAIL server is used as explained in Example 9 to determine probable coding regions. This information is supplemented by location of start and stop codons. Where possible, the results of the CRM analysis are validated by comparison of the cDNA sequence to known sequences using database matching, in accordance with Examples 3 and 4. If a match of 50% (or even less) is found in any particular reading frame and orientation, this serves to verify corresponding CRM results. Alternatively, database matches can be used to determine reading frame and orientation without use of the CRM program. Of course, if the cDNA is derived from a directional library, the probable orientation is already known.

#### EXAMPLE 15

##### Preparation of PCR Primers and Amplification of DNA

The EST sequences and the corresponding cDNA sequences and genomic sequences may be used, in accordance with the

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present invention, to prepare PCR primers for a variety of applications. The PCR primers are preferably at least 15 bases, and more preferably at least 18 bases in length. The procedure of Example 5 is repeated using the desired EST, or using the corresponding cDNA or genomic DNA sequence from Example 13. It is preferred that the primer pairs have approximately the same G/C ratio, so that melting temperatures are approximately the same. When screening cDNA, introns are of no concern; however, when screening genomic DNA, primers should be selected to avoid reading across introns, which usually are too large to amplify. The PCR primers and amplified DNA of this Example find use in the Examples that follow.

#### EXAMPLE 16

##### Forensic Matching by DNA Sequencing

In one exemplary method, DNA samples are isolated from forensic specimens of, for example, hair, semen, blood or skin cells by conventional methods. A panel of PCR primers derived from a number of the sequences of Example 1, 2, 11, 12 and/or 13 is then utilized in accordance with Example 12 to obtain DNA of approximately 100-200 bases in length from the forensic specimen. Corresponding sequences are obtained from a suspect. Each of these identification DNAs is then sequenced, and a simple database comparison determines the differences, if any, between the sequences from the suspect and those from the sample. Statistically significant differences between the suspect's DNA sequences and those from the sample conclusively prove a lack of identity. This lack of identity can be proven, for example, with only one sequence. Identity, on the other hand, should be demonstrated with a large number of sequences, all matching. Preferably, a minimum of 50 statistically identical sequences

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of 100 bases in length are used to prove identity between the suspect and the sample.

**EXAMPLE 17**

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**Positive Identification by DNA Sequencing**

The technique outlined in the previous example may also be used on a larger scale to provide a unique fingerprint-type identification of any individual. In this technique, primers are prepared from a large number of sequences from Examples 1, 2, 11, 12 and/or 13. Preferably, 20 to 50 different primers are used. These primers are used to obtain a corresponding number of PCR-generated DNA segments from the individual in question in accordance with Example 15. Each of these DNA segments is sequenced, using the methods set forth in Example 1. The database of sequences generated through this procedure uniquely identifies the individual from whom the sequences were obtained. The same panel of primers may then be used at any later time to absolutely correlate tissue or other biological specimen with that individual.

**EXAMPLE 18**

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**Southern Blot Forensic Identification**

The procedure of Example 17 is repeated to obtain a panel of from 10 to 2000 amplified sequences from an individual and a specimen. This PCR-generated DNA is then digested with one or a combination of, preferably, four base specific restriction enzymes. Such enzymes are commercially available and known to those of skill in the art. After digestion, the resultant gene fragments are size separated in multiple duplicate wells on an agarose gel and transferred to nitrocellulose using Southern blotting techniques well known to those with skill in the art. For a review of Southern

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blotting see Davis et al. (Basic Methods in Molecular Biology, 1986, Elsevier Press. pp 62-65).

5 A panel of ESTs or complete cDNA sequences from Examples 1, 2, and/or 13, or fragments thereof of at least 15 bases, are radioactively or colorimetrically labeled using end-labeled oligonucleotides derived from the ESTs, nick translated sequences or the like using methods known in the art and hybridized to the Southern blot using techniques known in the art (Davis et al., supra). Preferably, at least 10 5 to 10 of these labeled probes are used, and more preferably at least about 20 or 30 are used to provide a unique pattern. The resultant bands appearing from the hybridization of a large sample of ESTs will be a unique identifier. Since the restriction enzyme cleavage will be different for every 15 individual, the band pattern on the Southern blot will also be unique. Increasing the number of EST probes will provide a statistically higher level of confidence in the identification since there will be an increased number of sets of bands used for identification.

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#### EXAMPLE 19

##### Dot Blot Identification Procedure

25 Another technique for identifying individuals using the sequences disclosed herein utilizes a dot blot hybridization technique.

Genomic DNA is isolated from nuclei of subject to be identified. Oligonucleotide probes of approximately 30 bp in 30 length were synthesized that correspond to sequences from the ESTs. The probes are used to hybridize to the genomic DNA through conditions known to those in the art. The oligonucleotides are end labelled with  $P^{32}$  using polynucleotide kinase (Pharmacia). Dot Blots are created by 35 spotting about 50 ng cDNA of at least 10, preferably at least 50 sequences corresponding to a variety of the Sequence ID

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NOS provided in Table 7 onto nitrocellulose or the like using a vacuum dot blot manifold (BioRad, Richmond California). The nitrocellulose filter containing the EST clone sequences is baked or UV linked to the filter, prehybridized and hybridized with labeled probe using techniques known in the art (Davis et al. supra). The  $^{32}\text{P}$  labeled DNA fragments are sequentially hybridized with successively stringent conditions to detect minimal differences between the 30 bp sequence and the DNA. Tetramethylammonium chloride is useful for identifying clones containing small numbers of nucleotide mismatches (Wood et al., Proc. Natl. Acad. Sci. USA 82(6):1585-1588 (1985) which is hereby incorporated by reference. A unique pattern of dots distinguishes one individual from another individuals.

#### EXAMPLE 20

##### Alternative "Fingerprint" Identification Technique

EST sequences and the corresponding complete cDNA sequences can be used to create a unique fingerprint for an individual. Thus pools of EST sequences can be used in forensics, paternity suits or the like to differentiate one individual from another.

Entire EST sequences can be used; similarly oligonucleotides can be prepared from EST sequences. In this example, 20-mer oligonucleotides are prepared from 200 EST sequences using commercially available oligonucleotide services such as Oligos Etc., Wilsonville, OR. Patient cell samples are processed for DNA using techniques well known to those with skill in the art. The nucleic acid is digested with restriction enzymes EcoRI and XbaI. Following digestion, samples are applied to wells for electrophoresis. The procedure, as known in the art, may be modified to accommodate polyacrylamide electrophoresis, however in this example, samples containing 5 ug of DNA are loaded into wells

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and separated on 0.8% agarose gels. The gels are transferred using Southern blotting techniques onto nitrocellulose.

10 ng of each of the oligos are pooled and end-labeled with  $P^{32}$ . The nitrocellulose is prehybridized with blocking solution and hybridized with the labeled probes. Following hybridization and washing, the nitrocellulose filter is exposed to X-Omat AR X-ray film. The resulting hybridization pattern will be unique for each individual.

It is additionally contemplated within this example that the representative number of EST sequences can be varied for additional accuracy or clarity.

#### EXAMPLE 21

##### Identification of genes associated with hereditary diseases

This example illustrates an approach useful for the association of EST sequences with particular phenotypic characteristics. In this example, a particular EST is used as a test probe to associate that EST with a particular phenotypic characteristic.

An EST clone corresponding to EST01643, (SEQ ID NO 1894) maps to a gene rich region of chromosome 6. EST clone HHCMH89, from which EST01643 was derived, was mapped to chromosome 6p21 by Dr. Julie Korenberg of UCLA/Cedar Sinai Hospital using FISH. A search of Mendelian Inheritance in Man (supra) revealed 6p21 to be a very gene rich region containing several known genes and several diseases for which genes have not been identified. The cDNA encoded by EST clone HHCMH89 thus becomes an immediate candidate for each of these genetic diseases.

Cells from patients with these diseases are isolated and expanded in culture. PCR primers from the EST sequences are used to screen genomic DNA and RNA or cDNA from the patients. ESTs that are not amplified in the patients can be positively associated with a particular disease by further analysis.



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## EXAMPLE 22

Identification of a gene associated with  
Angelman's disease

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Angelman's disease (AD) is characterized by deletions on the long arm of chromosome 15 (15q11q13) (Williams et al. Am. J. Med. Genet. 32:339-345 (1989) hereby incorporated by reference). The symptoms of the disease include developmental delay, seizures, inappropriate laughter and ataxic movements. These symptoms suggest that the disorder is a neurologic deficiency. This prophetic example illustrates how ESTs, preferably obtained from a cDNA library from human brain, may be used in identifying the defective gene or genes associated with Angelman's Disease. (The example is based on analogous work with genomic DNA, rather than cDNA and ESTs, in identifying the genetic defect associated with Angelman's Disease.) This example also illustrates how EST sequences may generally be used for identifying gene sequences associated with an inherited disease that is mapped to a chromosome location.

ESTs are screened using techniques described in Example 5 and Example 7 to identify those ESTs that localize to the long arm of chromosome 15 and preferably localize to chromosome 15 bands 15q11q13 from normal patients. ESTs that bind to the long arm of chromosome 15 are hybridized to chromosome 15 from AD patients. These studies are preferably performed using either fluorescence in situ hybridization or using somatic cell hybrids that contain fragments from the long arm of chromosome 15 from AD patients. Those chromosome 15-specific ESTs that do not map to chromosome 15 from AD patients are useful as markers for Angelman's Disease and can be incorporated into diagnostics for genetic screening. These ESTs are associated with chromosome deletions present in Angelman's disease. Identification of the gene associated with these AD negative ESTs and an analysis of the polypeptides encoded by the genes

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from normal patients is essential for providing gene or other therapies for AD patients.

Genetic diseases are not always accompanied by gene deletions. Therefore, it is also important to use the ESTs that bind to bands 15q11q13 from AD patients as tools to identify the polymorphisms present within the disease population. Restriction fragment length polymorphism (RFLP) analysis can be performed on patient cells from AD disease or from somatic cell hybrids created using the long arm of chromosome 15. For a review of RFLP techniques see Donis-Keller et al. (Cell 51:319-337 (1987) hereby incorporated by reference). DNA is isolated from the somatic cell lines or from cells from AD patients. The DNA is digested with one or more restriction enzymes according to techniques of Donis-Keller et al. The resulting fragments are separated by gel electrophoresis, denatured, transferred to nitrocellulose and hybridized with the selected radio-labeled ESTs that localize to the region of interest. The autoradiographic pattern is compared both to a number of AD patients and to normal patients. Common patterns of EST hybridization in AD patients that are not present in normal patients indicates that the genes associated with these ESTs are candidate genes affected by AD.

cDNA libraries are prepared from the somatic cell hybrids from AD patients. Libraries are prepared using Lambda Zap II Library Kits (Stratagene, La Jolla, California) or other commercially available library kits. The ESTs of interest are used as probes to identify those bacterial colonies carrying genes corresponding to the EST probes. Positive clones are sequenced and the sequences are compared to homologous gene sequences derived from normal patients.

Alterations, including deletions and substitutions, within gene sequences, associated with bands 15q11q13, are thus positively identified and associated with AD disease. Wagstaff et al. were able to identify deletions and substitutions in sequences encoding the GABA<sub>A</sub> receptor

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protein subunit from patients with Angelman's disease (Am. J. Hum. Genet. 49:330-337, (1991)). It is likely that other genes will additionally be associated with the disease.

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**EXAMPLE 23****Preparation and Use of Antisense Oligonucleotides**

10 Antisense RNA molecules are known to be useful for regulating translation within the cell. Antisense RNA molecules can be produced from EST sequences or from the corresponding gene sequences. These antisense molecules can be used as diagnostic probes to determine whether or not a particular gene is expressed in a cell. Similarly, the  
15 antisense molecules can be used as a therapeutic to regulate gene expression once the EST is associated with a particular disease (see Example 22).

The antisense molecules are obtained from a nucleotide sequence by reversing the orientation of the coding region with regard to the promoter. Thus, the antisense RNA is  
20 complementary to the corresponding mRNA. For a review of antisense design see Green et al., Ann. Rev. Biochem. 55:569-597 (1986), which is hereby incorporated by reference. The antisense sequences can contain modified sugar phosphate  
25 backbones to increase stability and make them less sensitive to RNase activity. Examples of the modifications are described by Rossi et al., Pharmacol. Ther. 50(2):245-254, (1991).

Antisense molecules are introduced into cells that  
30 express the gene corresponding to the EST of interest in culture. In a preferred application of this invention, the polypeptide encoded by the gene is first identified, so that the effectiveness of antisense inhibition on translation can be monitored using techniques that include but are not  
35 limited to antibody-mediated tests such as RIAs and ELISA, functional assays, or radiolabelling. The antisense molecule is introduced into the cells by diffusion or by transfection

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procedures known in the art. The molecules are introduced onto cell samples at a number of different concentrations preferably between  $1 \times 10^{-10} \text{M}$  to  $1 \times 10^{-4} \text{M}$ . Once the minimum concentration that can adequately control translation is identified, the optimized dose is translated into a dosage suitable for use in vivo. For example, an inhibiting concentration in culture of  $1 \times 10^{-7}$  translates into a dose of approximately 0.6 mg/kg bodyweight. Levels of oligonucleotide approaching 100 mg/kg bodyweight or higher may be possible after testing the toxicity of the oligonucleotide in laboratory animals.

The antisense can be introduced into the body as a bare or naked oligonucleotide, oligonucleotide encapsulated in lipid, oligonucleotide sequence encapsidated by viral protein, or as oligonucleotide contained in an expression vector such as those described in Example 25. The antisense oligonucleotide is preferably introduced into the vertebrate by injection. It is additionally contemplated that cells from the vertebrate are removed, treated with the antisense oligonucleotide, and reintroduced into the vertebrate. It is further contemplated that the antisense oligonucleotide sequence is incorporated into a ribozyme sequence to enable the antisense to bind and cleave its target. For technical applications of ribozyme and antisense oligonucleotides see Rossi et al.

#### EXAMPLE 24

##### Preparation and use of Triple Helix Probes

Triple helix oligonucleotides are used to inhibit transcription from a genome. They are particularly useful for studying alterations in cell activity as it is associated with a particular gene. The EST sequences or complete sequences of the present invention or, more preferably, a portion of those sequences, can be used to inhibit gene

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expression in individuals having diseases associated with a particular gene. Similarly, a portion of the EST or corresponding gene sequence can be used to study the effect of inhibiting transcription of a particular gene within a cell. Traditionally, homopurine sequences were considered the most useful. However, homopyrimidine sequences can also inhibit gene expression. Thus, both types of sequences from either the EST or from the gene corresponding to the EST are contemplated within the scope of this invention. Homopyrimidine oligonucleotides bind to the major groove at homopurine:homopyrimidine sequences. As an example, 10-mer to 20-mer homopyrimidine sequences from the ESTs can be used to inhibit expression from homopurine sequences. SEQ ID NOs such as 282, 888, 719, 670, 994, 240, 873 and 761 contain homopyrimidine 15-mers. Moreover the natural (beta) anomers of the oligonucleotide units can be replaced with alpha anomers to render the oligonucleotide more resistant to nucleases. Further, an intercalating agent such as ethidium bromide, or the like, can be attached to the 3' end of the alpha oligonucleotide to stabilize the triple helix. For information on the generation of oligonucleotides suitable for triple helix formation see Griffin et al. (Science 245:967-971 (1989), which is hereby incorporated by this reference).

The oligonucleotides may be prepared on an oligonucleotide synthesizer or they may be purchased commercially from a company specializing in custom oligonucleotide synthesis. The sequences are introduced into cells in culture using techniques known in the art that include but are not limited to calcium phosphate precipitation, DEAE-Dextran, electroporation, liposome-mediated transfection or native uptake. Treated cells are monitored for altered cell function. These cell functions are predicted based upon the homologies of the gene corresponding to the EST from which the oligonucleotide was derived, with known genes sequences that have been associated

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with a particular function. The cell functions can also be predicted based on the presence of abnormal physiologies within cells derived from individuals with a particular inherited disease, particularly when the EST is associated with the disease using techniques described in Example 22.

#### EXAMPLE 25

##### Gene expression from DNA Sequences Corresponding to ESTs

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A gene sequence of the present invention coding for all or part of a human gene product is introduced into an expression vector using conventional technology. (Techniques to transfer cloned sequences into expression vectors that direct protein translation in mammalian, yeast, insect or bacterial expression systems are well known in the art.) Commercially available vectors and expression systems are available from a variety of suppliers including Stratagene (La Jolla, California), Promega (Madison, Wisconsin), and Invitrogen (San Diego, California). If desired, to enhance expression and facilitate proper protein folding, the codon context and codon pairing of the sequence may be optimized for the particular expression organism, as explained by Hatfield, et al., U.S. Patent No. 5,082,767, incorporated herein by this reference.

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The following is provided as one exemplary method to generate polypeptide from cloned cDNA sequences. The cDNA from the EST of interest is sequenced to identify the methionine initiation codon for the gene and the poly A sequence. If the cDNA lacks a poly A sequence, this sequence can be added to the construct by, for example, splicing out the Poly A sequence from pSG5 (Stratagene) using BglI and SalI restriction endonuclease enzymes and incorporating it into the mammalian expression vector pXT1 (Stratagene). pXT1 contains the LTRs and a portion of the gag gene from Moloney Murine Leukemia Virus. The position of the LTRs in the construct allow efficient stable transfection. The vector

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includes the Herpes Simplex Thymidine Kinase promoter and the selectable neomycin gene. The cDNA is obtained by PCR from the bacterial vector using oligonucleotide primers complementary to the cDNA and containing restriction endonuclease sequences for Pst I incorporated into the 5' primer and BglII at the 5' end of the corresponding cDNA 3' primer, taking care to ensure that the cDNA is positioned inframe with the poly A sequence. The purified fragment obtained from the resulting PCR reaction is digested with PstI, blunt ended with an exonuclease, digested with Bgl II, purified and ligated to pXT1, now containing a poly A sequence and digested BglII.

The ligated product is transfected into mouse NIH 3T3 cells using Lipofectin (Life Technologies, Inc., Grand Island, New York) under conditions outlined in the product specification. Positive transfectants are selected after growing the transfected cells in 600ug/ml G418 (Sigma, St. Louis, Missouri). The protein is preferably released into the supernatant. However if the protein has membrane binding domains, the protein may additionally be retained within the cell or expression may be restricted to the cell surface.

Since it may be necessary to purify and locate the transfected product, synthetic 15-mer peptides synthesized from the predicted cDNA sequence are injected into mice to generate antibody to the polypeptide encoded by the cDNA.

If antibody production is not possible, the cDNA sequence is additionally incorporated into eukaryotic expression vectors and expressed as a chimeric with, for example,  $\beta$ -globin. Antibody to  $\beta$ -globin is used to purify the chimeric. Corresponding protease cleavage sites engineered between the  $\beta$ -globin gene and the cDNA are then used to separate the two polypeptide fragments from one another after translation. One useful expression vector for generating  $\beta$ -globin chimerics is pSG5 (Stratagene). This vector encodes rabbit  $\beta$ -globin. Intron II of the rabbit  $\beta$ -globin gene facilitates splicing of the expressed transcript,

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and the polyadenylation signal incorporated into the construct increases the level of expression. These techniques as described are well known to those skilled in the art of molecular biology. Standard methods are published in methods texts such as Davis et al. and many of the methods are available from the technical assistance representatives from Stratagene, Life Technologies, Inc., or Promega. Polypeptide may additionally be produced from either construct using in vitro translation systems such as In vitro Express™ Translation Kit (Stratagene).

### Example 26

#### Production of an Antibody to a Human Protein

Substantially pure protein or polypeptide is isolated from the transfected or transformed cells as described in Example 25. Concentration of protein in the final preparation is adjusted, for example, by concentration on an Amicon filter device, to the level of a few micrograms/ml. Monoclonal or polyclonal antibody to the protein can then be prepared as follows:

##### A. Monoclonal Antibody Production by Hybridoma Fusion

Monoclonal antibody to epitopes of any of the peptides identified and isolated as described can be prepared from murine hybridomas according to the classical method of Kohler, G. and Milstein, C., *Nature* 256:495 (1975) or derivative methods thereof. Briefly, a mouse is repetitively inoculated with a few micrograms of the selected protein over a period of a few weeks. The mouse is then sacrificed, and the antibody producing cells of the spleen isolated. The spleen cells are fused by means of polyethylene glycol with mouse myeloma cells, and the excess unfused cells destroyed by growth of the system on selective media comprising aminopterin (HAT media). The successfully fused cells are diluted and aliquots of the dilution placed in wells of a



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microtiter plate where growth of the culture is continued. Antibody-producing clones are identified by detection of antibody in the supernatant fluid of the wells by immunoassay procedures, such as Elisa, as originally described by Engvall, E., *Meth. Enzymol.* 70:419 (1980), and derivative methods thereof. Selected positive clones can be expanded and their monoclonal antibody product harvested for use. Detailed procedures for monoclonal antibody production are described in Davis, L. et al. *Basic Methods in Molecular Biology* Elsevier, New York. Section 21-2.

#### B. Polyclonal Antibody Production by Immunization

Polyclonal antiserum containing antibodies to heterogenous epitopes of a single protein can be prepared by immunizing suitable animals with the expressed protein described above, which can be unmodified or modified to enhance immunogenicity. Effective polyclonal antibody production is affected by many factors related both to the antigen and the host species. For example, small molecules tend to be less immunogenic than other and may require the use of carriers and adjuvant. Also, host animals vary in response to site of inoculations and dose, with both inadequate or excessive doses of antigen resulting in low titer antisera. Small doses (ng level) of antigen administered at multiple intradermal sites appears to be most reliable. An effective immunization protocol for rabbits can be found in Vaitukaitis, J. et al. *J. Clin. Endocrinol. Metab.* 33:988-991 (1971).

Booster injections can be given at regular intervals, and antiserum harvested when antibody titer thereof, as determined semi-quantitatively, for example, by double immunodiffusion in agar against known concentrations of the antigen, begins to fall. See, for example, Ouchterlony, O. et al., Chap. 19 in: *Handbook of Experimental Immunology* D. Wier (ed) Blackwell (1973). Plateau concentration of antibody is usually in the range of 0.1 to 0.2 mg/ml of serum (about 12  $\mu$ M). Affinity of the antisera for the antigen is

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determined by preparing competitive binding curves, as described, for example, by Fisher, D., Chap. 42 in: **Manual of Clinical Immunology**, 2d Ed. (Rose and Friedman, eds.) Amer. Soc. For Microbiol., Washington, D.C. (1980).

5       Antibody preparations prepared according to either protocol are useful in quantitative immunoassays which determine concentrations of antigen-bearing substances in biological samples; they are also used semi-quantitatively or qualitatively to identify the presence of antigen in a  
10       biological sample.

#### EXAMPLE 27

##### Identification of Tissue Types or Cell Species by Means of Labeled Tissue Specific Antibodies

15       Identification of specific tissues is accomplished by the visualization of tissue specific antigens by means of antibody preparations according to Example 26 which are conjugated, directly or indirectly to a detectable marker.  
20       Selected labeled antibody species bind to their specific antigen binding partner in tissue sections, cell suspensions, or in extracts of soluble proteins from a tissue sample to provide a pattern for qualitative or semi-qualitative interpretation.

25       Antisera for these procedures must have a potency exceeding that of the native preparation, and for that reason, antibodies are concentrated to a mg/ml level by isolation of the gamma globulin fraction, for example, by ion-exchange chromatography or by ammonium sulfate  
30       fractionation. Also, to provide the most specific antisera, unwanted antibodies, for example to common proteins, must be removed from the gamma globulin fraction, for example by means of insoluble immunoabsorbents, before the antibodies are labeled with the marker. Either monoclonal or  
35       heterologous antisera is suitable for either procedure.

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#### A. Immunohistochemical Techniques

Purified, high-titer antibodies, prepared as described above, are conjugated to a detectable marker, as described, for example, by Fudenberg, H., Chap. 26 in: **Basic & Clinical Immunology**, 3rd Ed. Lange, Los Altos, California (1980) or Rose, N. et al., Chap. 12 in: **Methods in Immunodiagnosis**, 2d Ed. John Wiley & Sons, New York (1980).

A fluorescent marker, either fluorescein or rhodamine, is preferred, but antibodies can also be labeled with an enzyme that supports a color producing reaction with a substrate, such as horseradish peroxidase. Markers can be added to tissue-bound antibody in a second step, as described below. Alternatively, the specific antitissue antibodies can be labeled with ferritin or other electron dense particles, and localization of the ferritin coupled antigen-antibody complexes achieved by means of an electron microscope. In yet another approach, the antibodies are radiolabeled, with, for example  $^{125}\text{I}$ , and detected by overlaying the antibody treated preparation with photographic emulsion.

Preparations to carry out the procedures can comprise monoclonal or polyclonal antibodies to a single gene copy or protein, identified as specific to a tissue type, for example, brain tissue, or antibody preparations to several antigenically distinct tissue specific antigens can be used in panels, independently or in mixtures, as required.

Tissue sections and cell suspensions are prepared for immunohistochemical examination according to common histological techniques. Multiple cryostat sections (about 4  $\mu\text{m}$ , unfixed) of the unknown tissue and known control, are mounted and each slide covered with different dilutions of the antibody preparation. Sections of known and unknown tissues should also be treated with preparations to provide a positive control, a negative control, for example, pre-immune sera, and a control for non-specific staining, for example, buffer.

Treated sections are incubated in a humid chamber for 30 min at room temperature, rinsed, then washed in buffer for 30-45 min. Excess fluid is blotted away, and the marker developed.

5        If the tissue specific antibody was not labeled in the first incubation, it can be labeled at this time in a second antibody-antibody reaction, for example, by adding fluorescein- or enzyme-conjugated antibody against the immunoglobulin class of the antiserum-producing species, for  
10        example, fluorescein labeled antibody to mouse IgG. Such labeled sera are commercially available.

15        The antigen found in the tissues by the above procedure can be quantified by measuring the intensity of color or fluorescence on the tissue section, and calibrating that signal using appropriate standards.

#### **B. Identification of Tissue Specific Soluble Proteins**

20        The visualization of tissue specific proteins and identification of unknown tissues from that procedure is carried out using the labeled antibody reagents and detection strategy as described for immunohistochemistry; however the sample is prepared according to an electrophoretic technique to distribute the proteins extracted from the tissue in an orderly array on the basis of molecular weight for detection.

25        A tissue sample is homogenized using a Virtis apparatus; cell suspensions are disrupted by Dounce homogenization or osmotic lysis, using detergents in either case as required to disrupt cell membranes, as is the practice in the art. Insoluble cell components such as nuclei, microsomes, and membrane fragments are removed by ultracentrifugation, and  
30        the soluble protein-containing fraction concentrated if necessary and reserved for analysis.

35        A sample of the soluble protein solution is resolved into individual protein species by conventional SDS polyacrylamide electrophoresis as described, for example, by Davis, L. et al., Section 19-2 in: *Basic Methods in Molecular Biology* (P. Leder, ed), Elsevier, New York (1986), using a

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range of amounts of polyacrylamide in a set of gels to resolve the entire molecular weight range of proteins to be detected in the sample. A size marker is run in parallel for purposes of estimating molecular weights of the constituent proteins. Sample size for analysis is a convenient volume of from 5-50  $\mu$ l, and containing from about 1 to 100  $\mu$ g protein. An aliquot of each of the resolved proteins is transferred by blotting to a nitrocellulose filter paper, a process that maintains the pattern of resolution. Multiple copies are prepared. The procedure, known as Western Blot Analysis, is well described in Davis, L. et al., (above) Section 19-3. One set of nitrocellulose blots is stained with Coomassie Blue dye to visualize the entire set of proteins for comparison with the antibody bound proteins. The remaining nitrocellulose filters are then incubated with a solution of one or more specific antisera to tissue specific proteins prepared as described in Example 26. In this procedure, as in procedure A above, appropriate positive and negative sample and reagent controls are run.

In either procedure A or B, a detectable label can be attached to the primary tissue antigen-primary antibody complex according to various strategies and permutations thereof. In a straightforward approach, the primary specific antibody can be labeled; alternatively, the unlabeled complex can be bound by a labeled secondary anti-IgG antibody. In other approaches, either the primary or secondary antibody is conjugated to a biotin molecule, which can, in a subsequent step, bind an avidin conjugated marker. According to yet another strategy, enzyme labeled or radioactive protein A, which has the property of binding to any IgG, is bound in a final step to either the primary or secondary antibody.

The visualization of tissue specific antigen binding at levels above those seen in control tissues to one or more tissue specific antibodies, prepared from the gene sequences identified from EST sequences, can identify tissues of unknown origin, for example, forensic samples, or

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differentiated tumor tissue that has metastasized to foreign bodily sites.

The entire contents of all references cited above are hereby incorporated by reference.

5 While the present invention has been described in some detail for purposes of clarity and understanding, one skilled in the art will appreciate that various changes in form and detail can be made without departing from the true scope of the invention.

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#### VII. Correlation of EST and Clone Identifiers

The EST sequences of the present invention are identified herein by SEQ ID NO, and are identified in the GenBank database by a different number, are identified in the inventors' lab (and upcoming publications) by EST number, and clones have been submitted to the American Type Culture Collection (Rockville, Maryland USA) under clone names. Table 12 cross references those different numbers for the ESTs from cDNA, SEQ ID NOS 1-2409.

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Certain Sequence ID NOS are excluded from some claims based on their homology to known non-human sequences (See Table 2).

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Table 12. SEQ ID NO Cross References

| SEQ ID | EST#     | GB#    | Clone | SEQ ID | EST#     | GB#    | Clone | SEQ ID | EST#     | GB#    | Clone | SEQ ID | EST#     | GB#    | Clone  |
|--------|----------|--------|-------|--------|----------|--------|-------|--------|----------|--------|-------|--------|----------|--------|--------|
| 1      | EST00007 | M61959 | HFA01 | 64     | EST00066 | M62010 | HCC13 | 128    | EST00252 | M62191 | HCC57 | 179    | EST00116 | M62058 | HCC01  |
| 2      | EST00009 | M61961 | HFA05 | 65     | EST00067 | M62011 | HCC18 | 129    | EST00321 | M62192 | HCC58 | 180    | EST00117 | M62059 | HCC09  |
| 3      | EST00010 | M61962 | HFA07 | 66     | EST00068 | M62012 | HCC21 | 130    | EST00322 | M62193 | HCC59 | 181    | EST00118 | M62060 | HCC11  |
| 4      | EST00011 | M61963 | HFA08 | 67     | EST00069 | M62013 | HCC22 | 131    | EST00323 | M62194 | HCC60 | 182    | EST00119 | M62061 | HCC15  |
| 5      | EST00012 | M61964 | HFA10 | 68     | EST00070 | M62014 | HCC23 | 132    | EST00324 | M62195 | HCC61 | 183    | EST00120 | M62062 | HCC36  |
| 6      | EST00013 | M61965 | HFA11 | 69     | EST00071 | M62015 | HCC24 | 133    | EST00325 | M62196 | HCC62 | 184    | EST00121 | M62063 | HCC41  |
| 7      | EST00014 | M61966 | HFA26 | 70     | EST00072 | M62016 | HCC25 | 134    | EST00326 | M62197 | HCC63 | 185    | EST00122 | M62064 | HCC49  |
| 8      | EST00234 | M62172 | HFA20 | 71     | EST00073 | M62017 | HCC26 | 135    | EST00327 | M62198 | HCC64 | 186    | EST00123 | M62065 | HCC50  |
| 9      | EST00376 | M61967 | HFA23 | 72     | EST00074 | M62018 | HCC27 | 136    | EST00328 | M62199 | HCC65 | 187    | EST00124 | M62066 | HCC51  |
| 10     | EST00016 | M61968 | HFA36 | 73     | EST00075 | M62019 | HCC28 | 137    | EST00329 | M62200 | HCC66 | 188    | EST00125 | M62067 | HCC52  |
| 11     | EST00018 | M62172 | HFA39 | 74     | EST00076 | M62020 | HCC29 | 138    | EST00330 | M62201 | HCC67 | 189    | EST00126 | M62068 | HCC53  |
| 12     | EST00274 | M62172 | HFA51 | 75     | EST00077 | M62021 | HCC30 | 139    | EST00331 | M62202 | HCC68 | 190    | EST00127 | M62069 | HCC59  |
| 13     | EST00055 | M61969 | HFA66 | 76     | EST00078 | M62022 | HCC31 | 140    | EST00332 | M62203 | HCC69 | 191    | EST00128 | M62070 | HCC62  |
| 14     | EST00019 | M61970 | HFA69 | 77     | EST00079 | M62023 | HCC32 | 141    | EST00333 | M62204 | HCC70 | 192    | EST00129 | M62071 | HCC63  |
| 15     | EST00020 | M61971 | HFA71 | 78     | EST00080 | M62024 | HCC33 | 142    | EST00334 | M62205 | HCC71 | 193    | EST00130 | M62072 | HCC64  |
| 16     | EST00021 | M61972 | HFA77 | 79     | EST00081 | M62025 | HCC34 | 143    | EST00335 | M62206 | HCC72 | 194    | EST00131 | M62073 | HCC66  |
| 17     | EST00022 | M61973 | HFA84 | 80     | EST00082 | M62026 | HCC35 | 144    | EST00336 | M62207 | HCC73 | 195    | EST00132 | M62074 | HCC68  |
| 18     | EST00373 | M62299 | HFA86 | 81     | EST00083 | M62027 | HCC36 | 145    | EST00337 | M62208 | HCC74 | 196    | EST00133 | M62075 | HCC71  |
| 19     | EST00023 | M61974 | HFA87 | 82     | EST00084 | M62028 | HCC37 | 146    | EST00338 | M62209 | HCC75 | 197    | EST00134 | M62076 | HCC72  |
| 20     | EST00024 | M61975 | HFA89 | 83     | EST00085 | M62029 | HCC38 | 147    | EST00339 | M62210 | HCC76 | 198    | EST00135 | M62077 | HCC77  |
| 21     | EST00025 | M61976 | HFA90 | 84     | EST00086 | M62030 | HCC39 | 148    | EST00340 | M62211 | HCC77 | 199    | EST00136 | M62078 | HCC83  |
| 22     | EST00301 | M62239 | HFA90 | 85     | EST00087 | M62031 | HCC40 | 149    | EST00341 | M62212 | HCC78 | 200    | EST00137 | M62079 | HCC84  |
| 23     | EST00026 | M61977 | HFA90 | 86     | EST00088 | M62032 | HCC41 | 150    | EST00342 | M62213 | HCC79 | 201    | EST00138 | M62080 | HCC87  |
| 24     | EST00027 | M61978 | HFA90 | 87     | EST00089 | M62033 | HCC42 | 151    | EST00343 | M62214 | HCC80 | 202    | EST00139 | M62081 | HCC89  |
| 25     | EST00028 | M61979 | HFA90 | 88     | EST00090 | M62034 | HCC43 | 152    | EST00344 | M62215 | HCC81 | 203    | EST00140 | M62082 | HCC91  |
| 26     | EST00029 | M62245 | HCA02 | 89     | EST00091 | M62035 | HCC44 | 153    | EST00345 | M62216 | HCC82 | 204    | EST00141 | M62083 | HCC96  |
| 27     | EST00030 | M61979 | HCA08 | 90     | EST00092 | M62036 | HCC45 | 154    | EST00346 | M62217 | HCC83 | 205    | EST00142 | M62084 | HCC105 |
| 28     | EST00031 | M61980 | HCA08 | 91     | EST00093 | M62037 | HCC46 | 155    | EST00347 | M62218 | HCC84 | 206    | EST00143 | M62085 | HCC110 |
| 29     | EST00032 | M61981 | HCA09 | 92     | EST00094 | M62038 | HCC47 | 156    | EST00348 | M62219 | HCC85 | 207    | EST00144 | M62086 | HCC117 |
| 30     | EST00033 | M61982 | HCA10 | 93     | EST00095 | M62039 | HCC48 | 157    | EST00349 | M62220 | HCC86 | 208    | EST00145 | M62087 | HCC126 |
| 31     | EST00034 | M61983 | HCA11 | 94     | EST00096 | M62040 | HCC49 | 158    | EST00350 | M62221 | HCC87 | 209    | EST00146 | M62088 | HCC133 |
| 32     | EST00035 | M61984 | HCA11 | 95     | EST00097 | M62041 | HCC50 | 159    | EST00351 | M62222 | HCC88 | 210    | EST00147 | M62089 | HCC136 |
| 33     | EST00036 | M61985 | HCA11 | 96     | EST00098 | M62042 | HCC51 | 160    | EST00352 | M62223 | HCC89 | 211    | EST00148 | M62090 | HCC142 |
| 34     | EST00037 | M61986 | HCA11 | 97     | EST00099 | M62043 | HCC52 | 161    | EST00353 | M62224 | HCC90 | 212    | EST00149 | M62091 | HCC147 |
| 35     | EST00038 | M61987 | HCA11 | 98     | EST00100 | M62044 | HCC53 | 162    | EST00354 | M62225 | HCC91 | 213    | EST00150 | M62092 | HCC154 |
| 36     | EST00039 | M61988 | HCA11 | 99     | EST00101 | M62045 | HCC54 | 163    | EST00355 | M62226 | HCC92 | 214    | EST00151 | M62093 | HCC155 |
| 37     | EST00040 | M61989 | HCA11 | 100    | EST00102 | M62046 | HCC55 | 164    | EST00356 | M62227 | HCC93 | 215    | EST00152 | M62094 | HCC155 |
| 38     | EST00041 | M61990 | HCA11 | 101    | EST00103 | M62047 | HCC56 | 165    | EST00357 | M62228 | HCC94 | 216    | EST00153 | M62095 | HCC155 |
| 39     | EST00042 | M61991 | HCA11 | 102    | EST00104 | M62048 | HCC57 | 166    | EST00358 | M62229 | HCC95 | 217    | EST00154 | M62096 | HCC155 |
| 40     | EST00043 | M61992 | HCA11 | 103    | EST00105 | M62049 | HCC58 | 167    | EST00359 | M62230 | HCC96 | 218    | EST00155 | M62097 | HCC155 |
| 41     | EST00044 | M61993 | HCA11 | 104    | EST00106 | M62050 | HCC59 | 168    | EST00360 | M62231 | HCC97 | 219    | EST00156 | M62098 | HCC155 |
| 42     | EST00045 | M61994 | HCA11 | 105    | EST00107 | M62051 | HCC60 | 169    | EST00361 | M62232 | HCC98 | 220    | EST00157 | M62099 | HCC155 |
| 43     | EST00046 | M61995 | HCA11 | 106    | EST00108 | M62052 | HCC61 | 170    | EST00362 | M62233 | HCC99 | 221    | EST00158 | M62100 | HCC155 |
| 44     | EST00047 | M61996 | HCA11 | 107    | EST00109 | M62053 | HCC62 | 171    | EST00363 | M62234 | HCC00 | 222    | EST00159 | M62101 | HCC155 |
| 45     | EST00048 | M61997 | HCA11 | 108    | EST00110 | M62054 | HCC63 | 172    | EST00364 | M62235 | HCC01 | 223    | EST00160 | M62102 | HCC155 |
| 46     | EST00049 | M61998 | HCA11 | 109    | EST00111 | M62055 | HCC64 | 173    | EST00365 | M62236 | HCC02 | 224    | EST00161 | M62103 | HCC155 |
| 47     | EST00050 | M61999 | HCA11 | 110    | EST00112 | M62056 | HCC65 | 174    | EST00366 | M62237 | HCC03 | 225    | EST00162 | M62104 | HCC155 |
| 48     | EST00051 | M62000 | HCA11 | 111    | EST00113 | M62057 | HCC66 | 175    | EST00367 | M62238 | HCC04 | 226    | EST00163 | M62105 | HCC155 |
| 49     | EST00052 | M62001 | HCA11 | 112    | EST00114 | M62058 | HCC67 | 176    | EST00368 | M62239 | HCC05 | 227    | EST00164 | M62106 | HCC155 |
| 50     | EST00053 | M62002 | HCA11 | 113    | EST00115 | M62059 | HCC68 | 177    | EST00369 | M62240 | HCC06 | 228    | EST00165 | M62107 | HCC155 |
| 51     | EST00054 | M62003 | HCA11 | 114    | EST00116 | M62060 | HCC69 | 178    | EST00370 | M62241 | HCC07 | 229    | EST00166 | M62108 | HCC155 |
| 52     | EST00055 | M62004 | HCA11 | 115    | EST00117 | M62061 | HCC70 | 179    | EST00371 | M62242 | HCC08 | 230    | EST00167 | M62109 | HCC155 |
| 53     | EST00056 | M62005 | HCA11 | 116    | EST00118 | M62062 | HCC71 | 180    | EST00372 | M62243 | HCC09 | 231    | EST00168 | M62110 | HCC155 |
| 54     | EST00057 | M62006 | HCA11 | 117    | EST00119 | M62063 | HCC72 | 181    | EST00373 | M62244 | HCC10 | 232    | EST00169 | M62111 | HCC155 |
| 55     | EST00058 | M62007 | HCA11 | 118    | EST00120 | M62064 | HCC73 | 182    | EST00374 | M62245 | HCC11 | 233    | EST00170 | M62112 | HCC155 |
| 56     | EST00059 | M62008 | HCA11 | 119    | EST00121 | M62065 | HCC74 | 183    | EST00375 | M62246 | HCC12 | 234    | EST00171 | M62113 | HCC155 |
| 57     | EST00060 | M62009 | HCA11 | 120    | EST00122 | M62066 | HCC75 | 184    | EST00376 | M62247 | HCC13 | 235    | EST00172 | M62114 | HCC155 |
| 58     | EST00061 | M62010 | HCA11 | 121    | EST00123 | M62067 | HCC76 | 185    | EST00377 | M62248 | HCC14 | 236    | EST00173 | M62115 | HCC155 |
| 59     | EST00062 | M62011 | HCA11 | 122    | EST00124 | M62068 | HCC77 | 186    | EST00378 | M62249 | HCC15 | 237    | EST00174 | M62116 | HCC155 |
| 60     | EST00063 | M62012 | HCA11 | 123    | EST00125 | M62069 | HCC78 | 187    | EST00379 | M62250 | HCC16 | 238    | EST00175 | M62117 | HCC155 |
| 61     | EST00064 | M62013 | HCA11 | 124    | EST00126 | M62070 | HCC79 | 188    | EST00380 | M62251 | HCC17 | 239    | EST00176 | M62118 | HCC155 |
| 62     | EST00065 | M62014 | HCA11 | 125    | EST00127 | M62071 | HCC80 | 189    | EST00381 | M62252 | HCC18 | 240    | EST00177 | M62119 | HCC155 |
| 63     | EST00066 | M62015 | HCA11 | 126    | EST00128 | M62072 | HCC81 | 190    | EST00382 | M62253 | HCC19 | 241    | EST00178 | M62120 | HCC155 |
|        |          |        |       | 127    | EST00129 | M62073 | HCC82 | 191    | EST00383 | M62254 | HCC20 | 242    | EST00179 | M62121 | HCC155 |
|        |          |        |       |        | EST00130 | M62074 | HCC83 | 192    | EST00384 | M62255 | HCC21 | 243    | EST00180 | M62122 | HCC155 |
|        |          |        |       |        | EST00131 | M62075 | HCC84 | 193    | EST00385 | M62256 | HCC22 | 244    | EST00181 | M62123 | HCC155 |
|        |          |        |       |        | EST00132 | M62076 | HCC85 | 194    | EST00386 | M62257 | HCC23 | 245    | EST00182 | M62124 | HCC155 |
|        |          |        |       |        | EST00133 | M62077 | HCC86 | 195    | EST00387 | M62258 | HCC24 | 246    | EST00183 | M62125 | HCC155 |
|        |          |        |       |        | EST00134 | M62078 | HCC87 | 196    | EST00388 | M62259 | HCC25 | 247    | EST00184 | M62126 | HCC155 |
|        |          |        |       |        | EST00135 | M62079 | HCC88 | 197    | EST00389 | M62260 | HCC26 | 248    | EST00185 | M62127 | HCC155 |
|        |          |        |       |        | EST00136 | M62080 | HCC89 | 198    | EST00390 | M62261 | HCC27 | 249    | EST00186 | M62128 | HCC155 |
|        |          |        |       |        | EST00137 | M62081 | HCC90 | 199    | EST00391 | M62262 | HCC28 | 250    | EST00187 | M62129 | HCC155 |
|        |          |        |       |        | EST00138 | M62082 | HCC91 | 200    | EST00392 | M62263 | HCC29 | 251    | EST00188 | M62130 | HCC155 |
|        |          |        |       |        | EST00139 | M62083 | HCC92 | 201    | EST00393 | M62264 | HCC30 | 252    | EST00189 | M62131 | HCC155 |
|        |          |        |       |        | EST00140 | M62084 | HCC93 | 202    | EST00394 | M62265 | HCC31 | 253    | EST00190 | M62132 | HCC155 |
|        |          |        |       |        | EST00141 | M62085 | HCC94 | 203    | EST00395 | M62266 | HCC32 | 254    | EST00191 | M62133 | HCC155 |
|        |          |        |       |        | EST00142 | M62086 | HCC95 | 204    | EST00396 | M62267 | HCC33 | 255    | EST00192 | M62134 | HCC155 |
|        |          |        |       |        | EST00143 | M62087 | HCC96 | 205    | EST00397 | M62268 | HCC34 | 256    | EST00193 | M62135 | HCC155 |
|        |          |        |       |        | EST00144 | M62088 | HCC97 | 206    | EST00398 | M62269 | HCC35 | 257    | EST00194 | M62136 | HCC155 |
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| SEQ. ID | EST#     | GB#    | Clone   | SEQ. ID | EST#     | GB#    | Clone   | SEQ. ID | EST#     | GB#    | Clone   | SEQ. ID | EST#     | GB#    | Clone   |
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| 440     | EST00487 | M78340 | HFBCA02 | 506     | EST00545 | M78398 | HFBCA92 | 645     | EST00653 | M78447 | HFBCB93 | 646     | EST00654 | M78491 | HFBCB57 |
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| 448     | EST00495 | M78348 | HFBCA10 | 514     | EST00553 | M78406 | HFBCA00 | 661     | EST00669 | M78455 | HFBCB01 | 662     | EST0     |        |         |

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| SEQ ID | EST#     | GB#    | Clone   | SEQ ID | EST#     | GB#    | Clone   | SEQ ID | EST#     | GB#    | Clone   |
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| 610    | EST00612 | M78464 | HFBCB28 | 742    | EST00716 | M78568 | HFBCD33 | 785    | EST00662 | M78514 | HFBCB34 |
| 611    | EST00613 | M78465 | HFBCB29 | 743    | EST00717 | M78569 | HFBCD34 | 786    | EST00663 | M78515 | HFBCB35 |
| 612    | EST00614 | M78466 | HFBCB30 | 744    | EST01537 | M77953 | HFBCD35 | 787    | EST01517 | M77933 | HFBCB36 |
| 613    | EST00615 | M78467 | HFBCB31 | 745    | EST00718 | M78570 | HFBCD36 | 788    | EST01518 | M77934 | HFBCB37 |
| 614    | EST01497 | M83333 | HFBCB32 | 746    | EST00719 | M78571 | HFBCD37 | 789    | EST00664 | M78516 | HFBCB38 |
| 615    | EST00616 | M78468 | HFBCB33 | 747    | EST00720 | M78572 | HFBCD38 | 790    | EST00665 | M78517 | HFBCB39 |
| 616    | EST01498 | M77913 | HFBCB34 | 748    | EST00721 | M78573 | HFBCD39 | 791    | EST00666 | M78518 | HFBCB40 |
| 617    | EST00617 | M78469 | HFBCB35 | 749    | EST01535 | M77950 | HFBCD40 | 792    | EST00667 | M78519 | HFBCB41 |
| 618    | EST01499 | M77914 | HFBCB36 | 750    | EST00722 | M78574 | HFBCD41 | 793    | EST00668 | M78520 | HFBCB42 |
| 619    | EST00618 | M78470 | HFBCB37 | 751    | EST00723 | M78575 | HFBCD42 | 794    | EST00669 | M78521 | HFBCB43 |
| 620    | EST01500 | M77915 | HFBCB38 | 752    | EST00724 | M78576 | HFBCD43 | 795    | EST00670 | M78522 | HFBCB44 |
| 621    | EST00619 | M78471 | HFBCB39 |        |          |        |         | 796    | EST00671 | M78523 | HFBCB45 |
| 622    | EST00620 | M78472 | HFBCB40 |        |          |        |         | 797    | EST00672 | M78524 | HFBCB46 |
| 623    | EST01499 | M83334 | HFBCB41 |        |          |        |         | 798    | EST00673 | M78525 | HFBCB47 |
| 624    | EST00621 | M78473 | HFBCB42 |        |          |        |         | 799    | EST00674 | M78526 | HFBCB48 |
| 625    | EST01501 | M77916 | HFBCB43 |        |          |        |         | 800    | EST00675 | M78527 | HFBCB49 |
| 626    | EST00622 | M78474 | HFBCB44 |        |          |        |         | 801    | EST00676 | M78528 | HFBCB50 |
| 627    | EST00623 | M78475 | HFBCB45 |        |          |        |         | 802    | EST00677 | M78529 | HFBCB51 |
| 628    | EST01502 | M77917 | HFBCB46 |        |          |        |         | 803    | EST00678 | M78530 | HFBCB52 |
| 629    | EST00624 | M78476 | HFBCB47 |        |          |        |         | 804    | EST00679 | M78531 | HFBCB53 |

SUBSTITUTE SHEET

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| SEQ ID | EST#     | GB#    | Clone   | SEQ ID | EST#     | GB#    | Clone  | SEQ ID | EST#     | GB#    | Clone   |
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| 754    | EST00722 | M8574  | HFBC69  | 820    | EST01860 | M85346 | HFBC02 | 886    | EST01886 | M85372 | HFBC14  |
| 755    | EST00723 | M8575  | HFBC72  | 821    | EST01862 | M85348 | HFBC09 | 887    | EST01887 | M85373 | HFBC15  |
| 756    | EST01541 | M77957 | HFBC73  | 822    | EST01863 | M85349 | HFBC10 | 888    | EST01888 | M85374 | HFBC16  |
| 757    | EST01542 | M77958 | HFBC74  | 823    | EST01864 | M85350 | HFBC11 | 889    | EST01889 | M85375 | HFBC17  |
| 758    | EST00724 | M8576  | HFBC77  | 824    | EST01865 | M85351 | HFBC12 | 890    | EST01890 | M85376 | HFBC18  |
| 759    | EST00725 | M8577  | HFBC78  | 825    | EST01866 | M85352 | HFBC13 | 891    | EST01891 | M85377 | HFBC20  |
| 760    | EST00726 | M8578  | HFBC80  | 826    | EST01867 | M85353 | HFBC15 | 892    | EST01892 | M85378 | HFBC21  |
| 761    | EST01544 | M77960 | HFBC82  | 827    | EST01558 | M77974 | HFBC17 | 893    | EST01893 | M85379 | HFBC22  |
| 762    | EST00727 | M8579  | HFBC83  | 828    | EST00767 | M78410 | HFBC19 | 894    | EST01894 | M85380 | HFBC23  |
| 763    | EST00728 | M78580 | HFBC84  | 829    | EST00768 | M78620 | HFBC20 | 895    | EST01895 | M85381 | HFBC24  |
| 764    | EST00729 | M78581 | HFBC85  | 830    | EST01559 | M77975 | HFBC21 | 896    | EST01896 | M85382 | HFBC31  |
| 765    | EST00730 | M78582 | HFBC86  | 831    | EST00769 | M78621 | HFBC22 | 897    | EST01897 | M85383 | HFBC33  |
| 766    | EST00731 | M78583 | HFBC87  | 832    | EST00770 | M78622 | HFBC23 | 898    | EST01898 | M85384 | HFBC34  |
| 767    | EST00732 | M78584 | HFBC88  | 833    | EST01560 | M77976 | HFBC24 | 899    | EST01899 | M85385 | HFBC35  |
| 768    | EST00733 | M78585 | HFBC90  | 834    | EST00771 | M78623 | HFBC25 | 900    | EST01900 | M85386 | HFBC36  |
| 769    | EST00734 | M78586 | HFBC91  | 835    | EST00772 | M78624 | HFBC26 | 901    | EST01901 | M85387 | HFBC37  |
| 770    | EST00735 | M78587 | HFBC93  | 836    | EST00773 | M78625 | HFBC27 | 902    | EST01902 | M85388 | HFBC38  |
| 771    | EST01546 | M77962 | HFBC94  | 837    | EST01561 | M77977 | HFBC29 | 903    | EST01903 | M85389 | HFBC39  |
| 772    | EST00736 | M78588 | HFBC95  | 838    | EST00774 | M78626 | HFBC30 | 904    | EST01904 | M85390 | HFBC42  |
| 773    | EST01547 | M77963 | HFBC96  | 839    | EST01562 | M77978 | HFBC31 | 905    | EST01905 | M85391 | HFBC43  |
| 774    | EST01548 | M77964 | HFBCF01 | 840    | EST00775 | M78627 | HFBC32 | 906    | EST01906 | M85392 | HFBC45  |
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| 776    | EST00738 | M78590 | HFBCF07 | 842    | EST01563 | M77979 | HFBC34 | 908    | EST01908 | M85394 | HFBC50  |
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| 778    | EST00740 | M78592 | HFBCF10 | 844    | EST01565 | M77981 | HFBC37 | 910    | EST01910 | M85396 | HFBC57  |
| 779    | EST00741 | M78593 | HFBCF11 | 845    | EST00777 | M78629 | HFBC38 | 911    | EST01911 | M85397 | HFBC58  |
| 780    | EST01549 | M77965 | HFBCF13 | 846    | EST00778 | M78630 | HFBC40 | 912    | EST01912 | M85398 | HFBC60  |
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| 786    | EST00742 | M78594 | HFBCF41 | 852    | EST00782 | M78634 | HFBC51 | 918    | EST01920 | M85405 | HFBC70  |
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| 796    | EST00750 | M78602 | HFBCF53 | 862    | EST01872 | M85358 | HFBC77 | 928    | EST01931 | M85416 | HFBC84  |
| 797    | EST00751 | M78603 | HFBCF54 | 863    | EST01873 | M85359 | HFBC78 | 929    | EST01932 | M85417 | HFBC86  |
| 798    | EST01853 | M85339 | HFBCF56 | 864    | EST00787 | M78639 | HFBC79 | 930    | EST01933 | M85418 | HFBC87  |
| 799    | EST00752 | M78604 | HFBCF57 | 865    | EST01569 | M77985 | HFBC80 | 931    | EST01934 | M85419 | HFBC89  |
| 800    | EST00753 | M78605 | HFBCF58 | 866    | EST01874 | M85360 | HFBC81 | 932    | EST01935 | M85420 | HFBC90  |
| 801    | EST00754 | M78606 | HFBCF60 | 867    | EST01875 | M85361 | HFBC83 | 933    | EST01936 | M85421 | HFBC92  |
| 802    | EST00755 | M78607 | HFBCF61 | 868    | EST01876 | M85362 | HFBC84 | 934    | EST01937 | M85422 | HFBC93  |
| 803    | EST00756 | M78608 | HFBCF63 | 869    | EST00788 | M78640 | HFBC85 | 935    | EST01938 | M85423 | HFBC95  |
| 804    | EST00757 | M78609 | HFBCF68 | 870    | EST00789 | M78641 | HFBC88 | 936    | EST01939 | M85424 | HFBC96  |
| 805    | EST00758 | M78610 | HFBCF73 | 871    | EST00790 | M78642 | HFBC89 | 937    | EST01940 | M85425 | HFBC98  |
| 806    | EST00759 | M78611 | HFBCF74 | 872    | EST00791 | M78643 | HFBC90 | 938    | EST01941 | M85426 | HFBC101 |
| 807    | EST00760 | M78612 | HFBCF75 | 873    | EST00792 | M78644 | HFBC92 | 939    | EST01943 | M85428 | HFBC105 |
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| 809    | EST00762 | M78614 | HFBCF81 | 875    | EST00794 | M78646 | HFBC94 |        |          |        |         |
| 810    | EST00763 | M78615 | HFBCF84 | 876    | EST00795 | M78647 | HFBC96 |        |          |        |         |
| 811    | EST00764 | M78616 | HFBCF85 | 877    | EST01877 | M85363 | HFBC96 |        |          |        |         |
| 812    | EST01854 | M85340 | HFBCF86 | 878    | EST01878 | M85364 | HFBC90 |        |          |        |         |
| 813    | EST00765 | M78617 | HFBCF87 | 879    | EST01879 | M85365 | HFBC93 |        |          |        |         |
| 814    | EST00766 | M78618 | HFBCF89 | 880    | EST01880 | M85366 | HFBC95 |        |          |        |         |
| 815    | EST01855 | M85341 | HFBCF90 | 881    | EST01881 | M85367 | HFBC96 |        |          |        |         |
| 816    | EST01856 | M85342 | HFBCF91 | 882    | EST01882 | M85368 | HFBC97 |        |          |        |         |
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| 960    | EST01950 | M85434 | HFBC117 | 1011   | EST02025 | M85309 | HFBC120 |
| 959    | EST01951 | M85435 | HFBC117 | 1012   | EST02026 | M85310 | HFBC134 |
| 958    | EST01952 | M85436 | HFBC118 | 1013   | EST02027 | M85311 | HFBC135 |
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| 949    | EST01961 | M85445 | HFBC132 | 1022   | EST02036 | M85320 | HFBC154 |
| 948    | EST01962 | M85446 | HFBC136 | 1023   | EST02037 | M85321 | HFBC155 |
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| 944    | EST01966 | M85450 | HFBC144 | 1027   | EST02041 | M85325 | HFBC162 |
| 943    | EST01967 | M85451 | HFBC145 | 1028   | EST02042 | M85326 | HFBC163 |
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| 940    | EST01970 | M85454 | HFBC148 | 1031   | EST02045 | M85329 | HFBC166 |
| 939    | EST01971 | M85455 | HFBC148 | 1032   | EST02046 | M85330 | HFBC167 |
| 938    | EST01972 | M85456 | HFBC150 | 1033   | EST02047 | M85331 | HFBC168 |
| 937    | EST01973 | M85457 | HFBC151 | 1034   | EST02048 | M85332 | HFBC169 |
| 936    | EST01974 | M85458 | HFBC152 | 1035   | EST02049 | M85333 | HFBC170 |
| 935    | EST01975 | M85459 | HFBC152 | 1036   | EST02050 | M85334 | HFBC172 |
| 934    | EST01976 | M85460 | HFBC153 | 1037   | EST02051 | M85335 | HFBC173 |
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| 932    | EST01978 | M85462 | HFBC157 | 1039   | EST02053 | M85337 | HFBC175 |
| 931    | EST01979 | M85463 | HFBC158 | 1040   | EST02054 | M85338 | HFBC177 |
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| 929    | EST01981 | M85465 | HFBC158 | 1042   | EST02056 | M85340 | HFBC179 |
| 928    | EST01982 | M85466 | HFBC158 | 1043   | EST02057 | M85341 | HFBC180 |
| 927    | EST01983 | M85467 | HFBC158 | 1044   | EST02058 | M85342 | HFBC184 |
| 926    | EST01984 | M85468 | HFBC160 | 1045   | EST02059 | M85343 | HFBC185 |
| 925    | EST01985 | M85469 | HFBC162 | 1046   | EST02060 | M85344 | HFBC186 |
| 924    | EST01986 | M85470 | HFBC165 | 1047   | EST02061 | M85345 | HFBC187 |
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| 904    | EST02006 | M85490 | HFBC187 | 1067   | EST02081 | M85365 | HFBC195 |
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| 995    | EST02015 | M85499 | HFBC196 |        | EST02090 | M85374 | HFBC195 |
| 994    | EST02016 | M85500 | HFBC196 |        | EST02091 | M85375 | HFBC195 |
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| 992    | EST02018 | M85502 | HFBC196 |        |          |        |         |
| 991    | EST02019 | M85503 | HFBC196 |        |          |        |         |
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| 949    | EST02061 | M85545 | HFBC196 |        |          |        |         |
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| 940    | EST02070 | M85554 | HFBC196 |        |          |        |         |
| 939    | EST02071 | M85555 | HFBC196 |        |          |        |         |
| 938    | EST02072 | M85556 | HFBC196 |        |          |        |         |
| 937    | EST02073 | M85557 | HFBC196 |        |          |        |         |
| 936    | EST02074 | M85558 | HFBC196 |        |          |        |         |
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| 934    | EST02076 | M85560 | HFBC196 |        |          |        |         |
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| 923    | EST02087 | M85571 | HFBC196 |        |          |        |         |
| 922    | EST02088 | M85572 | HFBC196 |        |          |        |         |
| 921    | EST02089 | M85573 | HFBC196 |        |          |        |         |
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| 914    | EST02096 | M85580 | HFBC196 |        |          |        |         |
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| 1142   | EST02162 | M85647 | HFBC33   | 1263   | EST02292 | M85771 | HFBCN46 | 1208   | EST02233 | M85717 | HFBCN45 |
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| 1144   | EST02164 | M85649 | HFBC36   | 1265   | EST02294 | M85773 | HFBCN49 | 1210   | EST02235 | M85719 | HFBCN48 |
| 1145   | EST02165 | M85650 | HFBC38   | 1266   | EST02295 | M85774 | HFBCN50 | 1211   | EST02236 | M85720 | HFBCN49 |
| 1146   | EST02166 | M85651 | HFBC39   | 1267   | EST02296 | M85775 | HFBCN51 | 1212   | EST02237 | M85721 | HFBCN50 |
| 1147   | EST02167 | M85652 | HFBC41   | 1268   | EST02297 | M85776 | HFBCN52 | 1213   | EST02238 | M85722 | HFBCN53 |
| 1148   | EST02168 | M85653 | HFBC46   | 1269   | EST02298 | M85777 | HFBCN54 | 1214   | EST02239 | M85723 | HFBCN54 |
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| 1156   | EST02176 | M85661 | HFBC59   | 1277   | EST02306 | M85785 | HFBCN62 | 1222   | EST02247 | M85731 | HFBCN73 |
| 1157   | EST02177 | M85662 | HFBC64   | 1278   | EST02307 | M85786 | HFBCN64 | 1223   | EST02248 | M85732 | HFBCN74 |
| 1158   | EST02178 | M85663 | HFBC68   | 1279   | EST02308 | M85787 | HFBCN65 | 1224   | EST02249 | M85733 | HFBCN75 |
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| 1162   | EST02182 | M85667 | HFBC77   | 1283   | EST02312 | M85791 | HFBCN69 | 1228   | EST02253 | M85737 | HFBCN79 |
| 1163   | EST02183 | M85668 | HFBC79   | 1284   | EST02313 | M85792 | HFBCN71 | 1229   | EST02254 | M85738 | HFBCN80 |
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| 1166   | EST02186 | M85671 | HFBC85   | 1287   | EST02316 | M85795 | HFBCN82 | 1232   | EST02257 | M85741 | HFBCN83 |
| 1167   | EST02187 | M85672 | HFBC88   | 1288   | EST02317 | M85796 | HFBCN83 | 1233   | EST02258 | M85742 | HFBCN84 |
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| 1169   | EST02189 | M85674 | HFBC88   | 1290   | EST02319 | M85798 | HFBCN85 | 1235   | EST02260 | M85744 | HFBCN87 |
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| 1171   | EST02191 | M85676 | HFBC88   | 1292   | EST02321 | M85800 | HFBCN88 | 1237   | EST02262 | M85746 | HFBCN89 |
| 1172   | EST02192 | M85677 | HFBC88   | 1293   | EST02322 | M85801 | HFBCN89 | 1238   | EST02263 | M85747 | HFBCN90 |
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| 1176   | EST02196 | M85681 | HFBC88   | 1297   | EST02326 | M85805 | HFBCN92 | 1242   | EST02267 | M85751 | HFBCN96 |
| 1177   | EST02197 | M85682 | HFBC88   | 1298   | EST02327 | M85806 | HFBCN94 | 1243   | EST02268 | M85752 | HFBCN96 |
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| 1185   | EST02205 | M85690 | HFBC88   | 1306   | EST02335 | M85814 | HFBC92  | 1251   | EST02276 | M85760 | HFBCN96 |
| 1186   | EST02206 | M85691 | HFBC88   | 1307   | EST02336 | M85815 | HFBC92  |        |          |        |         |
| 1187   | EST02207 | M85692 | HFBC88   | 1308   | EST02337 | M85816 | HFBC92  |        |          |        |         |
| 1188   | EST02208 | M85693 | HFBC88   | 1309   | EST02338 | M85817 | HFBC92  |        |          |        |         |
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| 1190   | EST02210 | M85695 | HFBC88   | 1311   | EST02340 | M85819 | HFBC92  |        |          |        |         |
| 1191   | EST02211 | M85696 | HFBC88   | 1312   | EST02341 | M85820 | HFBC92  |        |          |        |         |
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| 1197   | EST02217 | M85702 | HFBC88   |        |          |        |         |        |          |        |         |
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| 1215   | EST02235 | M85720 | HFBC88   |        |          |        |         |        |          |        |         |
| 1216   | EST02236 | M85721 | HFBC88   |        |          |        |         |        |          |        |         |
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| 1218   | EST02238 | M85723 | HFBC88   |        |          |        |         |        |          |        |         |
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| 1221   | EST02241 | M85726 | HFBC88   |        |          |        |         |        |          |        |         |
| 1222   | EST02242 | M85727 | HFBC88   |        |          |        |         |        |          |        |         |
| 1223   | EST02243 | M85728 | HFBC88   |        |          |        |         |        |          |        |         |
| 1224   | EST02244 | M85729 | HFBC88   |        |          |        |         |        |          |        |         |
| 1225   | EST02245 | M85730 | HFBC88   |        |          |        |         |        |          |        |         |
| 1226   | EST02246 | M85731 | HFBC88   |        |          |        |         |        |          |        |         |
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| SEQ ID | EST#     | GB#    | Clone   | SEQ ID | EST#     | GB#    | Clone   | SEQ ID | EST#     | GB#    | Clone   |
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| 1318   | EST02348 | M85825 | HFBC042 | 1450   | EST02486 | M85962 | HFBCR57 | 1450   | EST02486 | M85962 | HFBCR57 |
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| 1322   | EST02352 | M85829 | HFBC046 | 1454   | EST02490 | M85966 | HFBCR57 | 1454   | EST02490 | M85966 | HFBCR57 |
| 1323   | EST02353 | M85830 | HFBC047 | 1455   | EST02491 | M85967 | HFBCR57 | 1455   | EST02491 | M85967 | HFBCR57 |
| 1324   | EST02354 | M85831 | HFBC048 | 1456   | EST02492 | M85968 | HFBCR57 | 1456   | EST02492 | M85968 | HFBCR57 |
| 1325   | EST02355 | M85832 | HFBC049 | 1457   | EST02493 | M85969 | HFBCR57 | 1457   | EST02493 | M85969 | HFBCR57 |
| 1326   | EST02356 | M85833 | HFBC050 | 1458   | EST02494 | M85970 | HFBCR57 | 1458   | EST02494 | M85970 | HFBCR57 |
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| SEQ ID | EST#     | GB#    | Clone   | SEQ ID | EST#     | GB#    | Clone    | SEQ ID | EST#     | GB#    | Clone    |
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| 1599   | EST02638 | M86113 | HFBCY25 | 1731   | EST00893 | M78745 | HFBDJ113 | 1775   | EST00901 | M78753 | HFBDJ137 |
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| 255    | EST01074 | M78926 | HHCCH91 | HHCPC19 |        | EST01181 | M79033 | HHCPC19 | HHCPC19 |
| 256    | EST01075 | M78927 | HHCCH91 | HHCPC20 |        | EST01182 | M79034 | HHCPC20 | HHCPC20 |
| 257    | EST01076 | M78928 | HHCCH91 | HHCPC21 |        | EST01183 | M79035 | HHCPC21 | HHCPC21 |
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| 259    | EST01078 | M78930 | HHCCH91 | HHCPC23 |        | EST01185 | M79037 | HHCPC23 | HHCPC23 |
| 260    | EST01079 | M78931 | HHCCH91 | HHCPC24 |        | EST01186 | M79038 | HHCPC24 | HHCPC24 |
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| 295    | EST01114 | M78966 | HHCCH91 | HHCPC59 |        | EST01221 | M79073 | HHCPC59 | HHCPC59 |
| 296    | EST01115 | M78967 | HHCCH91 | HHCPC60 |        | EST01222 | M79074 | HHCPC60 | HHCPC60 |
| 297    | EST01116 | M78968 | HHCCH91 | HHCPC61 |        | EST01223 | M79075 | HHCPC61 | HHCPC61 |
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| SEQ. ID | EST#     | GB#    | Clone   | SEQ. ID | EST#     | GB#    | Clone   | SEQ. ID | EST#     | GB#    | Clone   |
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| 2072    | EST01152 | M79004 | HHCP135 | 2138    | EST01715 | M78124 | HHCPJ42 | 2204    | EST01265 | M78117 | HHCP176 |
| 2073    | EST01697 | M78107 | HHCP139 | 2139    | EST01716 | M78125 | HHCPJ44 | 2205    | EST01235 | M78144 | HHCP177 |
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| 2078    | EST01155 | M79007 | HHCP146 | 2144    | EST01216 | M79068 | HHCPJ65 | 2210    | EST01269 | M79122 | HHCP187 |
| 2079    | EST01156 | M79008 | HHCP147 | 2145    | EST01217 | M79069 | HHCPJ69 | 2211    | EST01270 | M79123 | HHCP196 |
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| 2082    | EST01159 | M79011 | HHCP150 | 2148    | EST01220 | M79072 | HHCPJ80 | 2214    | EST01273 | M79126 | HHCP205 |
| 2083    | EST01160 | M79012 | HHCP151 | 2149    | EST01221 | M79073 | HHCPJ81 | 2215    | EST01274 | M79127 | HHCP210 |
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| 2086    | EST01163 | M79015 | HHCP154 | 2152    | EST01224 | M79076 | HHCPJ91 | 2218    | EST01277 | M79129 | HHCP224 |
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| 2088    | EST01165 | M79017 | HHCP156 | 2154    | EST01226 | M79078 | HHCPK02 | 2220    | EST01279 | M78148 | HHCP228 |
| 2089    | EST01166 | M79018 | HHCP157 | 2155    | EST01227 | M79079 | HHCPK05 | 2221    | EST01280 | M78149 | HHCP230 |
| 2090    | EST01167 | M79019 | HHCP158 | 2156    | EST01719 | M78128 | HHCPK10 | 2222    | EST01281 | M79129 | HHCP231 |
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| 2094    | EST01171 | M79023 | HHCP162 | 2160    | EST01723 | M79083 | HHCPK22 | 2226    | EST01285 | M79133 | HHCP250 |
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| 2131    | EST01208 | M79060 | HHCP199 | 2197    | EST01760 | M79120 | HHCPK18 | 2263    | EST01322 | M79169 | HHCP312 |
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| 2134    | EST01211 | M79063 | HHCP202 | 2200    | EST01763 | M79123 | HHCPK21 | 2266    | EST01325 | M79172 | HHCP315 |
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| 2261   | EST01306 | M79158 | HICP054 | 2328   | EST01355 | M79207 | HICP008 | 2394   | EST01418 | M79263 | HICP008 |
| 2262   | EST01307 | M79159 | HICP055 | 2329   | EST01792 | M78199 | HICP009 | 2395   | EST01419 | M79264 | HICP009 |
| 2263   | EST01308 | M79160 | HICP056 | 2330   | EST01793 | M78200 | HICP010 | 2396   | EST01420 | M79265 | HICP010 |
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| 2274   | EST01319 | M79171 | HICP067 | 2341   | EST01364 | M79217 | HICP021 | 2407   | EST01431 | M86179 | HICP021 |
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| 2276   | EST01321 | M79173 | HICP069 | 2343   | EST01366 | M79219 | HICP023 | 2409   | EST00244 | M62182 | HICG50  |
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| 2300   | EST01345 | M79197 | HICP093 | 2367   | EST01388 | M79240 | HICP047 |        |          |        |         |
| 2301   | EST01346 | M79198 | HICP094 | 2368   | EST01389 | M79241 | HICP048 |        |          |        |         |
| 2302   | EST01347 | M79199 | HICP095 | 2369   | EST01811 | M78218 | HICP049 |        |          |        |         |
| 2303   | EST01348 | M79200 | HICP096 | 2370   | EST01390 | M79242 | HICP050 |        |          |        |         |
| 2304   | EST01349 | M79201 | HICP097 | 2371   | EST01391 | M79243 | HICP051 |        |          |        |         |
| 2305   | EST01350 | M79202 | HICP098 | 2372   | EST01392 | M79244 | HICP052 |        |          |        |         |
| 2306   | EST01351 | M79203 | HICP099 | 2373   | EST01393 | M79245 | HICP053 |        |          |        |         |
| 2307   | EST01352 | M79204 | HICP100 | 2374   | EST01394 | M79246 | HICP054 |        |          |        |         |
| 2308   | EST01353 | M79205 | HICP101 | 2375   | EST01815 | M78223 | HICP055 |        |          |        |         |
| 2309   | EST01354 | M79206 | HICP102 | 2376   | EST01395 | M79224 | HICP056 |        |          |        |         |
| 2310   | EST01355 | M79207 | HICP103 | 2377   | EST01396 | M79225 | HICP057 |        |          |        |         |
| 2311   | EST01356 | M79208 | HICP104 | 2378   | EST01397 | M79226 | HICP058 |        |          |        |         |
| 2312   | EST01357 | M79209 | HICP105 | 2379   | EST01398 | M79227 | HICP059 |        |          |        |         |
| 2313   | EST01358 | M79210 | HICP106 | 2380   | EST01399 | M79228 | HICP060 |        |          |        |         |
| 2314   | EST01359 | M79211 | HICP107 | 2381   | EST01400 | M79229 | HICP061 |        |          |        |         |
| 2315   | EST01360 | M79212 | HICP108 | 2382   | EST01401 | M79230 | HICP062 |        |          |        |         |
| 2316   | EST01361 | M79213 | HICP109 | 2383   | EST01402 | M79231 | HICP063 |        |          |        |         |
| 2317   | EST01362 | M79214 | HICP110 | 2384   | EST01403 | M79232 | HICP064 |        |          |        |         |
| 2318   | EST01363 | M79215 | HICP111 | 2385   | EST01404 | M79233 | HICP065 |        |          |        |         |
| 2319   | EST01364 | M79216 | HICP112 | 2386   | EST01405 | M79234 | HICP066 |        |          |        |         |
| 2320   | EST01365 | M79217 | HICP113 | 2387   | EST01406 | M79235 | HICP067 |        |          |        |         |
| 2321   | EST01366 | M79218 | HICP114 | 2388   | EST01407 | M79236 | HICP068 |        |          |        |         |
| 2322   | EST01367 | M79219 | HICP115 | 2389   | EST01408 | M79237 | HICP069 |        |          |        |         |
| 2323   | EST01368 | M79220 | HICP116 | 2390   | EST01409 | M79238 | HICP070 |        |          |        |         |
| 2324   | EST01369 | M79221 | HICP117 | 2391   | EST01410 | M79239 | HICP071 |        |          |        |         |
| 2325   | EST01370 | M79222 | HICP118 |        | EST01411 | M79240 | HICP072 |        |          |        |         |
| 2326   | EST01371 | M79223 | HICP119 |        | EST01412 | M79241 | HICP073 |        |          |        |         |
| 2327   | EST01372 | M79224 | HICP120 |        | EST01413 | M79242 | HICP074 |        |          |        |         |
| 2328   | EST01373 | M79225 | HICP121 |        | EST01414 | M79243 | HICP075 |        |          |        |         |
| 2329   | EST01374 | M79226 | HICP122 |        | EST01415 | M79244 | HICP076 |        |          |        |         |
| 2330   | EST01375 | M79227 | HICP123 |        | EST01416 | M79245 | HICP077 |        |          |        |         |
| 2331   | EST01376 | M79228 | HICP124 |        | EST01417 | M79246 | HICP078 |        |          |        |         |
| 2332   | EST01377 | M79229 | HICP125 |        | EST01418 | M79247 | HICP079 |        |          |        |         |
| 2333   | EST01378 | M79230 | HICP126 |        | EST01419 | M79248 | HICP080 |        |          |        |         |
| 2334   | EST01379 | M79231 | HICP127 |        | EST01420 | M79249 | HICP081 |        |          |        |         |
| 2335   | EST01380 | M79232 | HICP128 |        | EST01421 | M79250 | HICP082 |        |          |        |         |
| 2336   | EST01381 | M79233 | HICP129 |        | EST01422 | M79251 | HICP083 |        |          |        |         |
| 2337   | EST01382 | M79234 | HICP130 |        | EST01423 | M79252 | HICP084 |        |          |        |         |
| 2338   | EST01383 | M79235 | HICP131 |        | EST01424 | M79253 | HICP085 |        |          |        |         |
| 2339   | EST01384 | M79236 | HICP132 |        | EST01425 | M79254 | HICP086 |        |          |        |         |
| 2340   | EST01385 | M79237 | HICP133 |        | EST01426 | M79255 | HICP087 |        |          |        |         |
| 2341   | EST01386 | M79238 | HICP134 |        | EST01427 | M79256 | HICP088 |        |          |        |         |
| 2342   | EST01387 | M79239 | HICP135 |        | EST01428 | M79257 | HICP089 |        |          |        |         |
| 2343   | EST01388 | M79240 | HICP136 |        | EST01429 | M79258 | HICP090 |        |          |        |         |
| 2344   | EST01389 | M79241 | HICP137 |        | EST01430 | M79259 | HICP091 |        |          |        |         |
| 2345   | EST01390 | M79242 | HICP138 |        | EST01431 | M86177 | HICG50  |        |          |        |         |
| 2346   | EST01391 | M79243 | HICP139 |        | EST01432 | M86178 | HICG50  |        |          |        |         |
| 2347   | EST01392 | M79244 | HICP140 |        | EST01433 | M86179 | HICG50  |        |          |        |         |
| 2348   | EST01393 | M79245 | HICP141 |        | EST01434 | M86180 | HICG50  |        |          |        |         |
| 2349   | EST01394 | M79246 | HICP142 |        | EST01435 | M86181 | HICG50  |        |          |        |         |
| 2350   | EST01395 | M79247 | HICP143 |        | EST01436 | M86182 | HICG50  |        |          |        |         |
| 2351   | EST01396 | M79248 | HICP144 |        | EST01437 | M86183 | HICG50  |        |          |        |         |
| 2352   | EST01397 | M79249 | HICP145 |        | EST01438 | M86184 | HICG50  |        |          |        |         |
| 2353   | EST01398 | M79250 | HICP146 |        | EST01439 | M86185 | HICG50  |        |          |        |         |
| 2354   | EST01399 | M79251 | HICP147 |        | EST01440 | M86186 | HICG50  |        |          |        |         |
| 2355   | EST01400 | M79252 | HICP148 |        | EST01441 | M86187 | HICG50  |        |          |        |         |
| 2356   | EST01401 | M79253 | HICP149 |        | EST01442 | M86188 | HICG50  |        |          |        |         |
| 2357   | EST01402 | M79254 | HICP150 |        | EST01443 | M86189 | HICG50  |        |          |        |         |
| 2358   | EST01403 | M79255 | HICP151 |        | EST01444 | M86190 | HICG50  |        |          |        |         |
| 2359   | EST01404 | M79256 | HICP152 |        | EST01445 | M86191 | HICG50  |        |          |        |         |
| 2360   | EST01405 | M79257 | HICP153 |        | EST01446 | M86192 | HICG50  |        |          |        |         |
| 2361   | EST01406 | M79258 | HICP154 |        | EST01447 | M86193 | HICG50  |        |          |        |         |
| 2362   | EST01407 | M79259 | HICP155 |        | EST01448 | M86194 | HICG50  |        |          |        |         |
| 2363   | EST01408 | M86177 | HICG50  |        | EST01449 | M86195 | HICG50  |        |          |        |         |
| 2364   | EST01409 | M86178 | HICG50  |        | EST01450 | M86196 | HICG50  |        |          |        |         |
| 2365   | EST01410 | M86179 | HICG50  |        | EST01451 | M86197 | HICG50  |        |          |        |         |
| 2366   | EST01411 | M86180 | HICG50  |        | EST01452 | M86198 | HICG50  |        |          |        |         |
| 2367   | EST01412 | M86181 | HICG50  |        | EST01453 | M86199 | HICG50  |        |          |        |         |
| 2368   | EST01413 | M86182 | HICG50  |        | EST01454 | M86200 | HICG50  |        |          |        |         |
| 2369   | EST01414 | M86183 | HICG50  |        | EST01455 | M86201 | HICG50  |        |          |        |         |
| 2370   | EST01415 | M86184 | HICG50  |        | EST01456 | M86202 | HICG50  |        |          |        |         |
| 2371   | EST01416 | M86185 | HICG50  |        | EST01457 | M86203 | HICG50  |        |          |        |         |
| 2372   | EST01417 | M86186 | HICG50  |        | EST01458 | M86204 | HICG50  |        |          |        |         |
| 2373   | EST01418 | M86187 | HICG50  |        | EST01459 | M86205 | HICG50  |        |          |        |         |
| 2374   | EST01419 | M86188 | HICG50  |        | EST01460 | M86206 | HICG50  |        |          |        |         |
| 2375   | EST01420 | M86189 | HICG50  |        | EST01461 | M86207 | HICG50  |        |          |        |         |
| 2376   | EST01421 | M86190 | HICG50  |        | EST01462 | M86208 |         |        |          |        |         |

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NOTE REGARDING SEQUENCE LISTINGS: The listings of SEQ ID NOS: 1-2421 are in numerical order. However, an occasional number (for example, SEQ ID NO: 44) is not found in this list. In all, 9 SEQ ID NOS are not used. Nevertheless, the  
5 convention "1-2421" is used, for example, to refer to all the SEQ ID NOS in the following list, while "1-315" is used, for example, to refer to all the listed sequences falling between SEQ ID NO 1 and SEQ ID NO 315.

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## SEQUENCE LISTING

## (1) GENERAL INFORMATION:

(i) APPLICANT: Venter, J. Craig  
Adams, Mark D.  
Moreno, Ruben F.

(ii) TITLE OF INVENTION: Sequences Characteristic of Human Gene  
Transcription Product

(iii) NUMBER OF SEQUENCES: 2412 (1-2421, with 9 SEQ ID NOS unused.)

## (iv) CORRESPONDENCE ADDRESS:

(A) ADDRESSEE: Knobbe, Martens, Olson, and Bear  
(B) STREET: 620 Newport Center Dr. Sixteenth Floor  
(C) CITY: Newport Beach  
(D) STATE: CA  
(E) COUNTRY: USA  
(F) ZIP: 92660

## (v) COMPUTER READABLE FORM:

(A) MEDIUM TYPE: Floppy disk  
(B) COMPUTER: IBM PC compatible  
(C) OPERATING SYSTEM: PC-DOS/MS-DOS  
(D) SOFTWARE: PatentIn Release #1.0, Version #1.25

## (vi) CURRENT APPLICATION DATA:

(A) APPLICATION NUMBER: 07/837,195  
(B) FILING DATE: 12-FEB-1992

## (vii) PRIOR APPLICATION DATA:

(A) APPLICATION NUMBER: US 07/716,831  
(B) FILING DATE: 20-JUN-1991

## (viii) ATTORNEY/AGENT INFORMATION:

(A) NAME: Israelsen, Ned A.  
(B) REGISTRATION NUMBER: 29,655  
(C) REFERENCE/DOCKET NUMBER: NIH004.004CP1

## (ix) TELECOMMUNICATION INFORMATION:

(A) TELEPHONE: 619-235-8550  
(B) TELEFAX: 619-235-0176

SEQ ID NO:1: (Length of Sequence = 362 Nucleotides)

CTTCCCTTTT GTTCCCTTCA GTGTCCCTTT TAATTGCTTC CCTCCATTTT CCTTAGCAGC ATCCTAGTGG ATGCTCTGGG  
TTATCAGAGG AGCAAAACA TTTAAGTGTC AAATAATGCT CATTGTCTCC CTGGGATTTC TAAACAGAAA AAATGAAGAA

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AGAGGCAGAG AAGAGCTTCA CAAGGTGTGT GCCAGCTCTG CATCATTTCC AGCTGCTCAA CCACCATTC TCCCATTTTA  
GGTCCCCAA AGTAGGAGGT GGGGCCTCAC AGAGCTGCTG TGGGCTTTGG GTATCAAAAG CTGCAGCCAC CATATGGGGC  
ACTCTGGCT GGTGTACAGG GTGGGCATTG CCCAGGTCTT TT

SEQ ID NO:2: (Length of Sequence = 214 Nucleotides)

GTTTNCITTT TTCTTAGCT TCATTTCTCT TAAAAACAA GGAACAAGAA AACATTGCAC CAGCGTCTA AGCCTCAAAC  
AAAANACAA ACAATCCCC CTGCGAAGAA CAATAAATTT TACATCTCTT TGGCAACAAT AACTTAAAT CACCCAATT  
CCATTCGCTC CAACCACAGC AGTTAGTTAG TTACAAAAT ATTCCNTGTG CTGC

SEQ ID NO:3: (Length of Sequence = 344 Nucleotides)

ATTAAATAGGA AAGATGATTG TATAGATGGT GGGCTATTAA CTCAGATCAG GATGAGAATC GGGAGTGCCT TTACATGTGT  
GGTACCCAAA TGGGTGGTTG GATATAAGAG TAACAAAAGG ACTGAAAGG TTAAAAAGA AAGAAAAAA AAAAATCCCC  
TGGTGGGAG GGTGTTAAGT ATCGAGTGT TTTCCAAACC ATTCTCTC TGCTCACCTA CCCCTAGGTG ATTAAAGGAG  
ATAACTTTTA AAAAAGAAAG AATTGGCTCA AAGGTACTGT AAATTCTAGG ATTATATACC TTTATATAGG TTCAITCCCT  
GATCCCTGTA TTATCAAGGC ACAG

SEQ ID NO:4: (Length of Sequence = 352 Nucleotides)

GACCCGGTAA CCGAGGCGGC AAGGAGGCCA GGTAGTCCCG GCACCTCTCA CTCTGCAGAG ACCAGCGGCT TCGTGGGAGG  
CCTGTGGGTC ACACGTAGGG GCTAGAGCCA GCCTGCATCC TGCCACCGG GCTCCACTTG GAGATCAGCA GGAGGGCCAG  
TGTTGGACCC CTGCTGCCAC CTCTCTGGG CCGTGTCTCT TCTGGAAAT TAAGAAGGTG TGCTCCAGAG CCAAGAGGAG  
CAATAAGAAA CCTCGTGTGC CAGCTTCTTA AGGGTKGCAG TGCAAGACCC CA

SEQ ID NO:5: (Length of Sequence = 562 Nucleotides)

ATACCCCTAC ATATATATTC ACAGAAAATC ATATTGCATA TACTCTTTCT CCACATCATA AAAATGGGTG TTGGGCTCTC  
TAGGACACAA GGAAGCAGG CCAATTTCT CATATTTCA GGAATAAAT GAGTGCCCG AAGGTGTAAT AGGAACCTTT  
TACTAACCTC ATCTGACTTC ATCCTCACAC CAGCATTTTG TGTGTAAGGA AACTGGCCGA GAGTGGTTAA GAAATATATC  
CAAAGACGTA TAGTTCCAAA TGAACACGG ATCTTTTAT TTAAATCCA ATCATCTTTC CATTATATCA GCCAATGATG  
GAGCAGAAAG CTGGTCCAGG CAATCCAGA ATAGATCTTT CTAGGCACCC GTTCAGTGTG AGGAGGGGGA AGTGGCCTTG  
CCAAGGGGCC AGTGAGCTCA ATTAGGGTTA ACGCTGCTTC TTAGCCTACC CCAGGGGNC ACGCACTTAG GTTGTTTTGT  
GCCAGCTTT GGCAGGAAGC ATTCTCTCTT TCAAGATIN NAGCCTTGGG GTCATATATC GGGTGTATA GGGTCTTTT  
TT

SEQ ID NO:6: (Length of Sequence = 359 Nucleotides)

ACATGTCTC CTCTTTTCAA TTTTAGCAGT AATGTGATCC TCAAAAATGC ATTAATACTA GTTGAAGTAA ATAAACGGAA  
GAGCTCCAAA ATGCTGCAT TAAATGCATT TTTCCACACT AATGCCAATC ATCCAAAGCT ATTTTCAACA AGTCAGGTAT  
TCAAAGCTAT TCACCACT TGAAAGAGTA ATTACATTT ACTGAAGCAC TTATCTGTCC TACACTGATG GGAGTAAATG  
CTCTCATAG GTTATCTCAT GTACATTATG CCACCTTAC TTAAATGAT CACAATTNAG TGCTATAGGT TTTTGGGTAA  
ATGTTTTCCC NGGGGGAGTT GTTAAAAACA TGGCATTTC

SEQ ID NO:7: (Length of Sequence = 218 Nucleotides)

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AACTTGCAAC ATAATACTA GAAAAAGAGA AAATATCATC AAAATACAAA TAACTGTTAG AAATCATTCG TCAAAAGAAR  
AACCTGGCAA TGCATGATTA CGAAATGCAA AAGAMGATAC AGTTGCTCTC TGTATATGCG CTTTCCACAT CCACAGATTC  
AAACAACTGT GGATAAAAAA GGATTTTTC A TGCCATTAA ACAVCAATGC AACAGTAA

SEQ ID NO:8: (Length of Sequence = 345 Nucleotides)

CTACAATAGA AGGCAACTA TGTCCCTCCT TTGCTCAGAA ACITTTAATA TCTKCTATT TCCCCATGTA AAAGCCAATC  
CTCAACCACA GTGTAGAAGG GCTATCCATT TCTAGCTACA CATCTCCTCA GTCAGTGCCC CCAGCCCCAG TACTTGGGGA  
CTTTGCCCTT GCAGTTCCCT GTGCCAGCAA ACTCTTCTC CAGATGTCCA CATGACTCAC CCNCTCCTT CAGGGGTCTT  
CTCAAATGTC ACTTTACCAG AGGTGGCTTC CCTGACCATC CTGTATAAAT AGCATCACCC TACCTCCTAT CTCTCTCTCT  
AATGTCTCAG GAATTGATA TCAAG

SEQ ID NO:9: (Length of Sequence = 189 Nucleotides)

GTGAACAGAC TAAGGCCTTT NTGGAGGCC AGAATAAGAT TACTGTGCCA TTTCTTGAGC AGTGTCCTAT CAGAGGTTTA  
TACAAAGAGA GAATGACTGA ACTATATGAT TATCCANGT ATAGTTGCCA CTTCAAGAAA GGAGAACGGT GTTTTTATTT  
TTACAATACA GGNITINAGA ACCACCGG

SEQ ID NO:10: (Length of Sequence = 267 Nucleotides)

CTCCCTTGC CACCTGCTGG ACGGAGGGG CTAATACGAT GCCATGGGTG TCCTGTTTTT TTATTTCTCA GACAGGACTG  
CTCTGTAINT GTCTTTGGAT TCTACGTAGA TTTATATTTG TAAAATATTA CATTGTCTAT GACCAGAAGA AATGTCATTA  
TCGTAAATTT TAGATTCTGG NGTCTATATA TGNAAGNAAT ACTAATACT AACTGTTATA ACAWCAAAT GTGGGNTGTA  
TATCTACARG CCNGAGCCGA CTGTCA

SEQ ID NO:11: (Length of Sequence = 247 Nucleotides)

CTCATAAAGC CAGGGTGATA AAATGGTAG TTTCATGTTA TCTACAAGRC TAAGKTCAA ATTCCATGCA TGTGCTGRTA  
AAAGACCCAT NATGGKCTM ACTGTACTTA CTCCCATTT ATTAGCATTC ATTCTGGTCA CCAGCTCTAG TTCCTCTGCT  
TAGCGAATCT CGCTGTCTT CAAGATGTCA TTCAAATGTC ACATTTTGTG GGAAGCCTTG CCTTTTTTGA CACGGTCTCC  
CTGCCAC

SEQ ID NO:12: (Length of Sequence = 280 Nucleotides)

AAGGCGAGAG GCTTCTGGAG AAACCCACCC CACCAACGTC TTGATCTTGG ACTTTTAVCC TCCAGAGCTA TGAGAAAACA  
AVTTTCTGTV VATVGVGGCC ACTCAGCCTG TGGATACTGG CAGCOCTAGC AAACATAC ACACATACAT TTTAACTCG  
GTTAATCCT GTGCCATT CATTATGGTT CAGTTTMAA ATAGTCTAG TCTTATGVCC ACTGTMAAG TTCACCAGGA  
CATAGGSCAT TGGGAAAGG GGCTGTAACT TCTTGGATTA

SEQ ID NO:13: (Length of Sequence = 339 Nucleotides)

VCTVTCTVCC AACTTCATT AGATATTGAC TCTGGTGATG GGAACATTAA ATACATTCTC TCAGGGGAAG GAGCTGGAAC  
CATTTTTVTR ATTGATGACA AATCAGGGA CATTATGCC ACCAAGACGT TGGATCGAGA AGAGAGAGCC CAGTACAGT  
TGATGGCTCA GGCGGTGGAC AGGGACACCA ATGGGCCACT GGAGCCACCG TCGGAATTCA TTKTCAAGGK CCAGGACATT  
AATGACAGTC CTCCGAGGT TTCCTGCAG AGACCTATCA TGCCAACTGT GCCSTGTARA GGTCCAATKT TGGGTGSTGT  
ACGGTAGTGG GGAGGCCTG

SEQ ID NO:14: (Length of Sequence = 342 Nucleotides)

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GGGVCAGAAAG TAGCAGATTC TAGTAAAGGA CCAGATGAGG CAAAAATTAA GGCACCTCTTG GAAAGAACAG GCTACACACT  
 TGATGTGACC ACTGGACAGA GGAAGTATGG AGGACCACCT CCAGATTCCG TTTATYCAGG TCAGCAGCCT TCTGTTGGCA  
 CTGAGATATT TGIGGGAAAG ATCCCAAGAG ATCTATTTTG AGGATGAACT TGTTCATTAA TTTGAGAAAG CTTGGACCTA  
 TATGGGATCC TTGCTCTAAT GATGGATCCA CTCACTGGTC TCAATAGAGG TTAATGCGTT TGTCACITTT TTGTACAAAA  
 GGAGCARGCT CAAGGAGGGC TG

SEQ ID NO:15: (Length of Sequence = 354 Nucleotides)

ATGTTGATGC TGAAATTVAAGATCCACCAA TTCCAGAAAA ACCATGGAAG GTTCATGTGA AATGGATTTT GGACACTGAT  
 ATTTTCAATG AATGGATGAA TGAGGAGGAT TATRAGGTGG ATGAAAATAG GAAGCCTGTR AGTTTYCGTC AGCGGATTTT  
 AACCAAGAAT GAAGAGCCAG TCAGAAGTCC AGAAAGAAGA GATAGAAAAG CATCASCATA TGCTCGAAAG AGGAAACATT  
 CGCCTTCGCC TCCCCCTCCG ACACCAACAG AWTACGGGA AGAAGAGTGG GAAGAAAGGC CAAGCTAGCC TTTTATGGGG  
 AAGCCGCAAG AAGTCCAGAA AGAGGGWGG TTGA

SEQ ID NO:16: (Length of Sequence = 348 Nucleotides)

CAGGCAAGTT TCTTCCAGGA TGAGAAATCA GTGGAAAGTG AGGGCCAGCC AACAGCCACC ACCAACCACC CAACACGCGA  
 GCGAGACCAT CTTAAAGAG CCCAGCCAA GCTGACCATG GGTCTGACCC CAACTGAAG AAATGCCAG CCCAGCCAAA  
 CCCAATTGC TAACTGTAT TATAAGCAAG TACAATGGTC CTTACCTTAA GCCACTAAGT TTTGGGATGC TTTGTTACAC  
 AGCTATAGAT AAGCTGATAC AGGGAATGTC AGAWTCCATG ATGAGAGACC GAGCCTTTCA KTCTGTCAGA GGYACCTTVG  
 GTTGGCAAAA CTTCAAAAAG AGGGACCT

SEQ ID NO:17: (Length of Sequence = 415 Nucleotides)

AGCAYGGGCT GGGGGGCGG GAGTTAGGC TGGGCTTGT TTTACGCTCT GCCCCCACA CCCCCTCTC TTCCGTCTG  
 ATTAAGCCCA AGGGTTGGTG GACTTAACTT TCAGCCATC TCTAAGGTT TCACAGACTG GATCTTTCTA AACTTTATTG  
 GGTACCTGCT TCCCCTTTT CCTGGTAGTT TTCATCTACA AAAAGTCAAA ACCTGATCGA AATAGAAATA AGATCATCAA  
 ATTGGACCAT TCTCTTAGCG TTCGAGTGT CCGGCCAGAC TGGCATTGAG TACAGCTGA GATCCAAACA CATCACACTG  
 GCCTCAGTC ACCAATCTGC CACTCAGGC ACAAGGCTG CCGTGTGGT CACAAGGCTT TCCTTAATGT CGTCGGTGCC  
 CAGGTGAACC ACAAG

SEQ ID NO:18: (Length of Sequence = 356 Nucleotides)

GTATGTATGT CTGTAGGTAT TTCTATACTT AACCATCTGT GTCCCAATTA AGCTAAACAT GATTCATTCT GATGCCAACC  
 CCCATCCATC ATGCCATGGA TCGCTCTAGA CTCTTCCCT TGTAACCTCC CACTCAAACA GTGAGAAACC TTGCCCAGT  
 ATGTTTGGG GTAACCTCAC TGGGAGTTG CAGTCCCACT AGATGAATGC CAACCATTT GTTCATTAA AAGGACTTTT  
 GGAACCATAG AGCAATGGCT GGGCTGGTC TVGCAGTTC ATCTTGACTG AAACAATTGG CCATGAAGGC ACTTGCCAAG  
 GAAACTCTAG GGGCCACAAG GGTCTGGGT GCTTGC

SEQ ID NO:19: (Length of Sequence = 339 Nucleotides)

CATGCTTCCA TTTTITTTAG TTTTAAACCA CCAACCAAT ATTTTYCCTT TAAATTTTAA TCTTATAATA TAGAAATCTT  
 ATGTAAATGA AATTTTGTCA TGTTTCAAAT AAAGAGAACT GAAGTAGAAA ATAGAAATGC CAGTAAACAA CATAATGTTT  
 AATTTACAAC TTACATTAGG GGTTTGGGGG VATGCTAATT ATATATTGAG AATATACATT AGAACTCTTC AAAATGGGCT  
 CTTCTAATGA GGTCACTACT GAACATAATT GTTCCCTCTT CTGTATAATA GAATAGGTTT AAATGACTAG TCCAAATGGA  
 ATTATTGCCT TCTKGTAA



SEQ ID NO:20: (Length of Sequence = 437 Nucleotides)

AGAACAAGGG AACTCAGCAG CCCCTCCCTT CCATCAGCT GTTCTGAGA GATGCAATAT AGTAGTCATC GACATCATCC  
TTATCAACAG CATCATCACT CAGACAGTGG TGAAAGTCIT TCTTCACAAG GAAAAACAAA GATAAAGAAA TACATGAGCA  
TTAATCAGAA ATTTTCAAAG CTGGATTCT AATGATATGC ATTATCATTG GACATTCAAA TGCTATACAT CTTCTGATGA  
AGCCTCCTTG ACAGCAGCTA CACTTATTTC ACATTAGAAT GCCTAGAGAA ATCCTGACTG CCCAGCTTGG TCATGGGACC  
TTCCCCACTC TCTCTTGGA GGAATGAAAA GATGTGGCGG CTTTCTACTT TTGCTACTGA GCTGGGGTAT ATGGCTAGGT  
CCACTTTCTA AGGGGCTTGG AAGGGTTATT CCATCTG

SEQ ID NO:21: (Length of Sequence = 385 Nucleotides)

GTTTGATTG CTTTTTTTT AGAGTTTAC ATCAGTGTT TTCAGGAATA TTGGTCTTC ATTTTCTTTT CTGGAATAT  
TTTCTAGTTT TACTTTGTCA GAGTAAATTC TGGCTTCACA GAATTATTG TAGTCTCTCC TGTCTTGGTT TATTTCATCT  
GCTATAACAA AATACCACAG ACAAGGTGGT AATAAATAAC ACAAATTTAT TTTTCCAGT TCTGGAGGCT AGGAGTTCAA  
GAAGCTGGCA AGTTCAATGT CTGGTGAGAC CCATTCCTTC ATAGGTGGCA CCATCTAGGG GTCTTACAT GRCAAAGAGA  
TGGAAGGGCC AAAAGATGG TGACCTATTG TGAGGCCCTT TTTAAAGGC CTTVAAATCC CAGTC

SEQ ID NO:22: (Length of Sequence = 374 Nucleotides)

ACCTTCATGG TCATGAAGGC CATGCAGTCT CTCAAGTCCC GAGGCTACGT GAAGGAACAG TTTGCCCTGA GACATTTCTA  
CTGGTACCTT ACCAATGAGG GTATCCAGTA TCTCCGTGAT TACCTTCATC TGCCCCCGGA GATTGTGCCT GCCACCTTAC  
GCGTAGCCG TCCAGAGACT GGCAGGCTC GGCCTAAAGG TCTGGGAGGG TGAGCGACCT GCGAGACTCA CAAGAGGGGA  
AGCTGACAAG AGATACCTAC AAGACGGGAG TRCCTGTGCC ACGTGTGCC GACAAGAAAG CCGAGGCTTG GGTCTGGGTC  
AGCAACGAA TTCCAGTTTA GAGGCGGATT TVGGTGTGK ACGGTGTGAC CCAC

SEQ ID NO:23: (Length of Sequence = 322 Nucleotides)

CAAACGTGA TCACCACAGC TCCGTTCCTG CAGTGACACT TAACATACTC AGCATCTTCA TGAATTCTGA ATAATTIAC  
GATCGTAAAG TCTAAAAGTA TCAATTTCAG GTGAGCAGTT TTAAATCAGA AAATAGTCAA TAGTTAATCA TGACTCTTCA  
GGGTATTTCC TTCAAGTCT CTGAAGAGTT TCCAGAACAA TTCTTGTAAG AAGGAATGCC TCCCAACAAT GGAGAGCAAC  
AATAGCAACA GGCATCTGAA TCAGCCTGGC CTCTGAAAAC AGACCANAGA GGAGTTTATC TGTCTCTTCC AGTGAGGAA  
GG

SEQ ID NO:24: (Length of Sequence = 113 Nucleotides)

CCTGAAATCG GAGTCTTTTG GACTGACTCC AAATCAATG GGTGGCAGAG GCAGCACGGA GTCCAGTGA ATCTCCACCC  
CGTTAACAGG CCGGACGACA GCCCCTTGCA GCC

SEQ ID NO:25: (Length of Sequence = 399 Nucleotides)

GGAAAGAATG AAGGAAAAAC AAGACAAAAT CTACTTCATG GCTGGGTCCA GCAGAAAAGA GCAGACGCTG GCCTCAGACA  
CAGACAGCAG TCTTGATGCC TCGACGGGAC CCGTTGAAGG CTGTGATGA TAGGTTAGAA ATAGCAAACC TGTCAGCATT  
GAAGGAATC TCACCTCCGT GGGCTGAAA TGCTTGGGAG TTGATGGAAC CAAATAGAAA AACTCCATGT TCTGCATGTA  
AGAAACACAA TGCTTGCCC TACTCAGACC TGATAGGATT GCCTGCTTAG ATGATAAAT GAGGCAGAAT ATGCTTGAA  
GAAAAAANT GCAAGCCACA CTTCTNGAGA TTTTGTTCAA GATCCATTC AGGGTGAGCA GTTAGAGTAG GTTGAATTT

SEQ ID NO:26: (Length of Sequence = 350 Nucleotides)

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GATTGGTATA CGGGCAACAA TGGATTGATA GCCTTAATAT AGAAATAGTT CCAGCAGGCC AGATGCAGTG GCTCAATTCT  
GTAAACCCAG TGCTCTGCAC AGCTAGGAAG GAAGATCACT TGGGCCCAGG AGTTCAAGGC TCCAGTGAGC CATGATCACC  
CCACTKCCTC CAGCCTGGGT GACAGAGTNA GGCCCTGTCT CTAAAAAATG AAATAGCTCC ATCAAGTCAA TAATTAAAAG  
TTCAACAGCC CAACAGANCA AAAATTGTAA ATGANCAAA ATTAGAAAAT GTACAAATTA AATATTAATG ACCCATAACC  
CTATAAGGGA AAGTTTAACC TCTCTAGTAT TTTT

SEQ ID NO:27: (Length of Sequence = 322 Nucleotides)

AAAACGTGAT CACCACAGCT CCGTTCCTGC AGTGACACTT AACATACTCA GCATCTTCAT GAATTCIGAA TAATTTACTG  
ATCGTAAAGT CTAAAAGTAT CAATTTGAGG TGAGCAGTTT TAAATCAGAA AATAGTCAAT AGTTAATCAT GACTCTTCAG  
GGTATTTCTT TCACGTCTC TGAAGAGTTT CCCAGAACAT TCTTGTGAAA AGGAATGCCT CCCAACATG GAGGAGCAAC  
AATAGCAACA GGCATCTGAA TCAGCCTGGG CTCTGAAAAC AGACCAAAGA GNGTTTTTC TGCTTTCTTC CAGTGAGGAA  
GG

SEQ ID NO:28: (Length of Sequence = 287 Nucleotides)

TATTTTTATT AAAGGACCAC CCTGGCTGTM GTGAGATGAA TGGATTCAAA CAGGGCAAGA GTGGATACAG MGAGATAAGT  
TAGGAAGCTG GTATAGAAAT CTGGATGAGA TATGGTGGCT TGGATGATAC TAGCAGTGAG TATGGGAAGT AGGTGGATTA  
CTTACACTT TTTTAGATCA GTCKATTCTT GATGCTTGA AGACAAATTA ATCTCATATA TAACTCTAAA CAACATATTT  
ATATTTTCATG TAAATAAGGA TAATGCTGAC CAAATATTAG CACCTTT

SEQ ID NO:29: (Length of Sequence = 282 Nucleotides)

CAGGGCAGGG AAGCCTGGAA GCAAAGGAGG ACCTGGCTCC TGACTCTCAG AGAGGATAGG CTGGGATCCC TGGGGCAGGC  
CIGTTCCTTG GCTGGCCAAT TTAGTCTTTC AATTGTCTAA GGGCTCTCCA TTGCTGCCC TTGCTCTTT CTAGCCTGTT  
ATTTCTAGGC TCTCTGAAT AAATCTCAGG TTTCTACTG TCATGCCTTT AGTTCAAAAA TGAGAATCTG CCTACAGTG  
CTGGCCTCTT TCCGGCCTGA AAGCCAGCAC CTTKCGACCC GG

SEQ ID NO:30: (Length of Sequence = 345 Nucleotides)

GAAGCTGGTG AATACATTTT AAGACACAAC ATGGCACCTG TGTCTAGCTC TATGGTACAA CATGGTACTA TGACACATAT  
AATGGGTGTC CAGATGGGGA AGGCAGCTTC TCTGCAACTG AGCTGAGATC TCAAAATAGA CAATGTCAAG ATGGAATGAG  
AAGGGAAAAA CAGCATGTGT AGACAGGTAG TGACAAAAGG CTAATTAAGG ACTGAAAGAA ACCAGTGGCC AACAAAGGAA  
TCTACGGGTG ATAAAGATAA GACGGTGAGA GAGATAAGGC TAGATTGTAT AAGGCTTGAC AGACCATAGC AAGATAAGCA  
AGGACCTGTG TCTGTTAAC CATTT

SEQ ID NO:31: (Length of Sequence = 343 Nucleotides)

ATAAAATGG TCTGGGTACC CTAAGGTGTT TGCKTTGATA GAAAATTGAC ACCCCAACT AAGTGTCTA CTTAGCTTCT  
ACAATAGTTA TTCTAGACC TTAGATTAGT CATTACATTT TTATTTAAGG TACTATGTTA CTTTCATGAC TACAAAATGA  
GGCACTCGTA CAAAACAGGA ATGAAAACAT ACATATACTG TCTTGTCTTT ATGTGTTATT AATGCCAAAG ATATTGTCAG  
GGATTATTTT AAAGAAGCCC TTAATCATGA TGGCTATTTT TAAAAATGGC ACAGGACAGT AACAGGCTGA AAAGAAACAC  
CTGGTTTGAG GGGCCAAATT AAG

SEQ ID NO:32: (Length of Sequence = 153 Nucleotides)

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ACAGGATGGT CAGGACAAGC CACCTCTGGT AAAGTGACAT TTGAGANGAC CCTGAAGGN GGGGGGTTGA GTCATGTGGA  
CATCTTGAGG AAGAGTTTAC TGGCACAGG AACTGCAAGG KCAAAGTCCC CAAGTACTAG GGCTGGGGGC AGT

SEQ ID NO:33: (Length of Sequence = 257 Nucleotides)

TCAGTCAGCT TATCGCAGGT GCAGCCAAAC ACAAGCTTC AGGACAAATT GTACAACTT TACAATGTGG GATTTAAAIT  
TAAAATATGA TACATAAAAA TCTACACAAA ACTGATAAAA ATCAAGCACA GNTACCAGGA TTGAACTTA TAATAATCCA  
TGTTGTAAAG GGAGTCTTGT TTCCTTTCAA GTGCTTTTAT TCTGCTATGG AACAGTCAA ATGGAAGNTG TAAAGCTTTG  
TGGTTAGTTT AAATTAT

SEQ ID NO:34: (Length of Sequence = 307 Nucleotides)

CTCCCAACCA TATCTAATCC AACAAAGTCCA GCTGCCTCTC TCINAAMAAT ACCNARGATC AGGCCCCCTTC TCAGCACCCC  
CACAGCTGCT GOCOCAAAGG AAGCCACGTC ATCTCTCAG GAGATTGTTC AGCAGGCACT GCCTCCTTGT CACCTTCGCC  
TGTTGTCATT CTCCCAACAT GGCCAGGGAA TGCGTCTGT TAAAGTCTGC TAGGTCACGG TCCTTCCTAC TCAAAATGCT  
CCCTTGCTC CCACTGCCCC CAGAGTAAAA AGCCAGACC TTCAAATGAC ACAAGGCCT ACAACGA

SEQ ID NO:35: (Length of Sequence = 266 Nucleotides)

TCCACAGGTC ATCAGATGCC TGCTGATAA TATATAACA GTAAAAACA CTTTCACTTC TTCTATNT AATCGTGTGC  
CATGGATCTG ATCTGTACCA TGACCTACA TAAGGCTGGA TGGACCTCAG GCTGAGGGCC CAATGTATGT KTGCTGTGG  
GTGTGGTGG GAGTGTGTCT GCKGAGTAAG AACACGNTT TCAAGATTCT AAAGCTCAAT TMAAGTGGCA CATTAATRAT  
AAACTCAGAT CTGNTCAAAA GTCGG

SEQ ID NO:36: (Length of Sequence = 388 Nucleotides)

CAGCTTTGGA AAGACTTTGA CCTCTGAACA AAAAGCCAGA AGGCTGCTTA AAGAAATAGT AAGGGTTTCA CTTGCCCTGG  
ATAGTCACAA ATCTAGGAGT ACTGGTTTCA TGCCTTGGGT TACCAGGTAT CAGCTCTTC ACAATCTCTC CTCTTCCCAT  
GCTTCCCTT AAAGTCCAGT TGACAAATGA AAAAGAAAAA AAGGCCTTGA TTTATAGTAT TGCCAAACAA CCTCATAAGA  
ATGGGTAAAA TTACATACAC ACATACATAG AGAAGGGAGG TAATGCTGTG AATCTACTTG AGCTGGATTG CATGCTCCCT  
AGGGACACG GTGCCCAACC TGTAATTTTA TTTCTAACTT TTATAATAT ACTCCTTTTT CACGGATG

SEQ ID NO:37: (Length of Sequence = 342 Nucleotides)

GAATGTCTAC ACAAGGAAGT ACAGGATTTG GCTTTTCTAG ATGTCAATC CAAACTTCGC AGTCATGAGA ACAAAGTGT  
TGCCAGCAG GCCTCTCTCA CAGAGCAGAG ACTTACTGTG GAAAGCTGAG AACTGCCGA TACAGGCAT CATCCATCT  
CTAATTTCCC CTCTGTCTC CATCCAGGG CTCTCTCCG TTCACTCTCT ACCATACCAC TTGTGCATGC ATGTRATGTT  
CTAATACCAA TTGAAGAACC GCTGTAGGTA CCTCCCTAAT AAGGATTTCT AAACCTATAG TTAGTGTGAT CATGACTTTG  
GTCAAAGGCA AGTYTCCAC CC

SEQ ID NO:38: (Length of Sequence = 355 Nucleotides)

GATGACTTGG AGAATGCCGA AGAGGAAGGC CAGGAGAATG TCGAGATCCT CCCCTCTGGG GAGCGACGCG AGCCAACCAG  
AAGCGAATCA CCACACCATA CATGACCAAG TACGAGCGAG CCGCGTGTCT GGGCACCAGA GCGCTCCAGA TTGCGATGTG  
TGCCCTGTG ATGGTGGAGC TGGAGGGGGA GACAGATCCT CTGCTCATTG CCATGAAGGA ACTCAAGGCC OGAAAGATCC  
CCATCATCAT TCGCGTTAC CTGCCAGATG GGAGCTATGA AGACTGGGGG GGTGACGAG CTCATCATCA CGACTTGAG  
CTGGAGTCAT CTTTCTGMC CTTTGCCCCA TGCCC

SEQ ID NO:39: (Length of Sequence = 303 Nucleotides)

GCCAAAAACA NYTCGAACC CGTTTTGGGA AATAATGGGA TTCTTGATC ACGGGACAAC GAATCACCCCT GAAGTTTTTC  
TCCAGTTTAC TCAGTCACAT AAGCCACCAG AGGCTAACCA CACTGACAAC AAAAGCAAGT CCCAGGATTC CGGGGGCTAA  
TACCATGCTA GGCATTACTT GGAAGTTAT GAGTTGGTAT ACATCTGTGA ATTTGGTGGG AGGAGAAAAC TAACAGTAAA  
TTTATCAAAG CCAGTGGTAC GTTCAGCGTT ATAAAAATTA CAAGGATCTG CTTCTCGGCG ACT

SEQ ID NO:40: (Length of Sequence = 178 Nucleotides)

GGTGTGGGG GCTAGAGATA CACATGCCAG TNCATACAT TTCTCAGCAC TGTGCTGTG ATTACAGCA GTTCAATTGT  
TCATGCGATA TAAGCCAGTC ATGTGGCCA AGTTATCTG TCGGCTGTGT TCTCTGCAGG AATCTGATGC AAGAAGCCCT  
GAAGGATGCA TGGCTTTT

SEQ ID NO:41: (Length of Sequence = 322 Nucleotides)

TGCTTTCTT TAGAAATTTA GGGCAGTGTG ATGCTTCCAG AGGTCTGTAC AAACACCAGC TTTCATTGTG CTGGGGAGTT  
TCCATGCCCT TYCCTTCTCT TCGCTTAGTG CAGTTTCTG CTTTTATCA GTTTGACTGC CTGAGACTGA KTCCAACAAC  
CCAACTGAA CGCTCAGCTC CTCCTTTCA AAGGAGGATG ACTTNTCTNA ACAACTATTT AGGTGAATTA TTKCKACAGT  
TTATTAAAGC AATGGCTCTA AACAAATTC ACTGGGGGTG ACAAAGTACA ATACAAAAGG CGTACTCTGA GGGCTGGGG  
GT

SEQ ID NO:42: (Length of Sequence = 278 Nucleotides)

AACTTTGGC ATTTTATTC AGACACGTAT AAAACAAAA CAAAAACTT CAGTGATACA ACAGACGTTT TCCCTTAGTT  
CCCCATCAA GGGACAGAG GTGTGCAGCT GAAGCTGGAY CTTTTTCTG TCTACCTGG AAGCTGTCTC ACTGCTGGAT  
GAGAATGCT TCTAAAAGTG GATCTTGGG ATCCTTGTA ATTGCOCTC GGATAAGGAG TGAAGWTCAT TTACGGCACA  
TGTTGATTAT GTTTACACA AAGATGTCCA GTTATTTT

SEQ ID NO:43: (Length of Sequence = 225 Nucleotides)

AGATCAAAG ATGAGAGAAG CTGAAACAGA ACCGCATGAG GGAAGAGGA AAGTGGAAATC TCTGTGGCCC ATCTTCAGGA  
TCCACCACCA GAAAACCGT TACATCTTCG CCTCTTTTAC AAGCGGAAAG CCAGCAGCAG GATCTCTAGG AATATTAGTA  
TTAAGAAGG CTATGCAGCA TAAACCTGAT TTCAAATGG TAAAGCAAG GTTATGTGTA CTGT

SEQ ID NO:45: (Length of Sequence = 305 Nucleotides)

GGATTGCCAG GAGCTGTCC AGGTGGGGA GAGGCAGAT GGAATTTTG AAATCCAGCC TCAGGGGTCT CCGCCATTTT  
TGGTGAACCT CAAGATGACC TCAGATGGAG GCTGGACAGT AATTCAGAGG CGCCACGATG GCTCAGTGA CTTCAACCG  
CCCTKGGTAG CCTACAAGG GGTGGTTTTG GGGGATCCCC ACGGCGAGTT CTGGCTTGGG TCTTGGAGAA AGGKGCATAG  
CATCACGGGG GGACCGAAC AGCGMCTGG CCGTCAAMC TGCGGGGACT GGGATGGGCA AACGC

SEQ ID NO:46: (Length of Sequence = 264 Nucleotides)

ATGAAATAGC ATATCTNNGC CTAATTAAAA GATTCCATTA CATTTACTTT TATCATTTAT ACTGCCAAGG ATCAGTCACA  
AAAAATTCAA ATTATACATA TTATTCATGC TTTAATTICA TAAATAAGTA AATTAAAGCA AGCCAATATG TCTCTCTCA  
TAACATAGGG AAAAATTACT GTTAGCATA ACAGNGTAAT AGGCAAAGTC TAGCCATACA GCAGCAGTTC ACGGTGTGT  
CAAGTTGGKA CAGGTTCAT CGAT

SEQ ID NO:47: (Length of Sequence = 375 Nucleotides)

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GATCTCTTCC AGCGTCAATG TACTGGGACA GCAAACACTC ACATTTGAAG TTCCCTCTGG CCACCGGCTT CCCAGTACAT  
TGACCGTGGA AGAGATCATC TCAAATGGTT CTCCAGTGTC AGGCTGGAGA TCTCCAGAAA TGGAGTCTAC TCCTGGGGTG  
GCTTGTATGG GAGCC

SEQ ID NO:48: (Length of Sequence = 270 Nucleotides)

GTCTGTGAGA GCNACCGGGC AGCTCAMRCC CACAGCGGCT CCTCATCTTC TGTTGGTGGCA TCCTCATTC ACTCTCATCT  
GCCACCTKCT CAGGCGGGCC TCTAGCTTTC TCATGTACTC TAGCAATTC TGTTCTCTCT GCTGTAACTG CTCCTTTTCC  
TTCTGGAGCA CACGCGGGC TGACCGCAGC TGTTGAGCT TCCGCTTACT TTMGTACAAC TGTACCAGGC TAGAATCCTT  
TCTGCCTGGG TCAGCTTCAG TCTTTGAACA

SEQ ID NO:49: (Length of Sequence = 359 Nucleotides)

CCCTGAAGAG TGGGTGGGAC AACCAGATGG GTGTAACCCC TTGTGGGGGA AAAGGAGTGA GTTTACTTGG TAAATAATA  
ATGGTAATGT CAGCAGCGTG GCTGGGGGAC TCAGTATGGT CCGGGGAAA GAGTTGGGGC AGTGAACCTC CCAGGCCAGC  
TGGCCTTGGG CTGGCAGCAG GGAGGCTGCA GGGGGCTAC CTMTCTGCC ACGTCCCTGC CTAGGAAACC TATCCCAGGA  
CACCTGCTT TGGCCTGGAT AGCAGCCTAG GGATGAGCAT TTCTTTGAAA GCAATTAGGT TATTCACCTG GTATTAAAC  
TATTTACTGT TAAAAAATCT GTGACTTCAT GGAGTGGG

SEQ ID NO:50: (Length of Sequence = 271 Nucleotides)

CCAGGAAGGA CAGGAAGTGT CCTCTAATAC GCATAAGATC CAGTACAGGA GAGATGGGAA GAGAGKCTCC AGGATGAAGG  
GGAAARAGG CCGCATGCCA GTCACCTGGC ATCINCCAGA GAGGGYCAGY CINCOCCTG AGACTGGGC ACGAGTCCCG  
TCATCACCAT GCCTCTGAC TGTCGAACCTG TCTTTTACC TGACAAATAC TACACAGGTA TCGMTCTGG CCATACTCTG  
CTATCTAAAC CCAGGAACCTG ATTAGATTGT T

SEQ ID NO:51: (Length of Sequence = 226 Nucleotides)

CTCCAAGCAG TAAAGACTTG CAAAGCATTG CATTTTGATT AAACCTTGCT GGGCTGAAGG GCAGGCAGAG CTGTGGTGA  
CACTGGCAGG ACGCAGCACC CCCCAGCTGG CCGTGGCAG GCTGCACCGG GCGCATGCGG GTGTGGGCCA GGGTTGCTTT  
AGGAAGCAGG TGGAGTCTK NCACTGCAG KCGTCCAGG AGKGYACCAK GCCTGGCAGG GCATG

SEQ ID NO:52: (Length of Sequence = 408 Nucleotides)

GGTGGGGCAA GGTGGGGGTG AAGTGCATC CTGCTGCATG AGTGGCAGGG CAGGGTGCAC ACACACACGT GGGTCTGGC  
TGGGTGAGGC AAGCAAAACC TGCTGCACA TGGCAAAGG ATGTGGGAAG TATCCATGGG CCCCAGGGA AGCTGCAGTT  
TGGGGAGGGA ATGGGTGGCA CTGCTGCGTG TCTGTGGGG CCACCCCACT GGGGTCTCC AAGTGGTCAA GTTCGCTG  
CCAGGTAGA AGCTATGATG GGGCTTCTA GGACACTINGA GGCTGACCTG AAAGCAAGGT ACTTTTACA CTGGGACCT  
GCAAGAGGCC AACAGATT AAGGATGCTT CAGGTGAGAC TTGGCCCTCT TCTTATGGG CAAGACCTC CCGCAGAGT  
TCAGATCT

SEQ ID NO:53: (Length of Sequence = 314 Nucleotides)

TTCTGTGAG GAGGACCACA TGGCAGTCCA GCAGACTGCA CATTTTAAA AACTAGGTCT TCCAGGTAG TTTGAGGAGC  
ACCAGGGCAC ACTCAGGGA GGGACATGTC AGTGTCTGAG AGCTCACGGG AGGAAGGTGT AGTGACAACA TGGACCATGG  
TGGAGTGA CTAGACGCT CTGGGTGAG GAGAATCATC ATGTAACAAA GCATTAAATC ATTTGGAGAA ATTCAGAAA  
NTCTAGATG TACATTCTAG CCCACTTACC AGGCCTACTA AACGTAAATC AGATATATTT CAATTGAAT TCGG

SEQ ID NO:54: (Length of Sequence = 310 Nucleotides)

AAGCCACCGC ACCTGGCCCA TTACATTTAT AATGTTATAA GGGGGTTGAG GGGTCGTCCA CTGGAGCAGT GGTTCCTCAA  
CTCGTGTATG CATAGGAATT ACCTGAAGGG CTGTGTTAAA CACAACTGC AGGGCCACC CCCAGAGTTT CTGGTTGGGG  
AGGTGTGGGC TGGGCTTGAG GATGTGAATC TCTCACAAGC TCCAGGTGA GGCTGCTGGT CTGTGGACCC ACTTCAAAGA  
CCCAGTGAAT CAGAAGAGTC AGTGAGACTG GACAAATGAA CGCAAGACAG TCTTCAAAGG AGACCAGAGG

SEQ ID NO:55: (Length of Sequence = 252 Nucleotides)

TTTTTTTTT TYCCGGGGAR GTCAAACATA CTTTTTCAAC ATAGGATKTC TGACAGGAGG CCCTTGGMCA GGGTTCCTG  
ACCTCTGYTT CAAACCCAC TGGAAACAGA GCAAAGTCAT CAMGAAAACC CAGGACACCA GGGCAGGGGG GCTGCACAAG  
GTGGGTAGG TCACAGTGGG CCAGCACACA GTGGCCCCGC CCAGGTCCAG CCCAGCCTGG GGGAGGGTGT GAGGGTTCCA  
KGCAAGCTCA TT

SEQ ID NO:56: (Length of Sequence = 188 Nucleotides)

GTCAAGTCTA CCATCATTCT AGAAGGAAAA GGCATGGTGG GAATTCAGCA CCTGAACCTG TATTTACACC AGCCTCGGCA  
TCTGGCAAGG RAATAGCGAT TGTTCATAGT GATGCAGAGA GAGAACAGGA GGAKGAAGAA CAAATACACA CAAACAACTG  
ATCTAGGGAG ACTCCAARGA TCCAACAG

SEQ ID NO:57: (Length of Sequence = 304 Nucleotides)

AATCAGCCTG CAAGCAAAG ATAGGAATAT TCACCTACAG TGGGCACCTC CTTGAAGAAG CTGATAGCTT TTACACAGTA  
TTAGATTGAA ATAATGGACA GAAACACATT CTGTCAAGA AAGGGGGAGA GAAGTCTGTT TGCAAGTTTC AAAGCAAAAA  
GCAAAAGTGA AATGATTGTA GGATTCTGT TCTAATTGGA GATGATTCTC TGGTGTGTAG AAATGGCAAA TATTGATGAT  
TGTTGCTAT TGATTGGTGC AGGATACTTG GTATACGAGT AAATACTTGA GACTCGTGTG ACTT

SEQ ID NO:58: (Length of Sequence = 261 Nucleotides)

CCAGAAGCTT CTGCTCTCTC CTGTGCTCTC AGTGGTTCCTC TTCCCTGAAG TGCTCCCTT CTCATTAAAT ATAGCCTGTG  
TCTGAACATT GTGAGCTATA AGAACCTCA TATTAATGGT TAAGGGACTG TTGGAATGA TGTGATTTTA TTAAAAATGG  
GGTCTTTGTG GAGGAGTCAG GAATGGTCAA AATGAGCTTC AGGTATGGGG CTGTCTCTRT GCTCCTGATA CCAAGGGTCT  
GGCAAGCACA AAGGAAGGTG G

SEQ ID NO:59: (Length of Sequence = 470 Nucleotides)

AATACGTATT CTGAAGCCAC TATATCTGCA TATGTATCCC AGATTGTAAC AATTAAGTAA AAAGATGGTG AATGATGAAA  
GCCAGTTTTC TGCTGTAGA AGTGAGAGGT GACAGATAAC CAAAGGAAGA AGGCTAGAAT GGATAGAGGA CAGTCTTAA  
GTGTAGTTCC TGTGCTCTT AGTCTATAG ACTTCATTTC CAAAGTTTCT TAGCACCCCT CTCCCTCTT TGGTGAGGTT  
GTTTCACATA TTTCTAGAC AATTAGATTC TTTGTCAAA GTCTGTGTC CATCOGGAGA GCCTCTGATC TCTTAAATGA  
TTTTTTAAAT TTACATACAT TAAGGTTTAC TCTGCTGTAA AGGTCTGTGG GTTTTAAATCC TGCTCTACAG TTTTGCATA  
TGTTGGCCTT CTGCTGGGA ATACTCTCCC AGATATCCC CATGACTGGC CCTTATCTT CAATCAGATC

SEQ ID NO:60: (Length of Sequence = 466 Nucleotides)

GTTTTCAGG GGAAGGCAAC TMCAAGTTTG TGCAGCTGAA TTTCTGTAAA GTTAAGACAG ACTCAMCTTC TCATTCAATC  
TGGGGCAGTG GATAACCTTT CTGAATAGAC CCACTGTTC ACGGACAGGG ATAGAGGTTT GCTTTCTTC TTTCTGTAA  
TTTGGAGTGA GCACTAGGGA GGGGAAGTGC ATGGGTGACA TGAAGAAGGT GAAGATGTAG TAAAGCATC ATCCAGGTAC  
ACATTACGGT TGCTGCAGAA TTTTCAAT ACNACTGAGC GAGTCTGTAC TGGCAAAAGC AATTACTGAG CACAAAAGCT

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AGTCTCAAG GGCTGATTCC ACCTTCCCTG TCCAGGGACT TTCTCAGCA ACTTTGTTCA TGAGCAGTTG TTGCTTTGA  
TGGTCTTAGC CAGTTTTTGG TGCAGGGGTG TTCTCTGGT ACTAGGGCTA GGGCAGCTGT TTAAG

SEQ ID NO:61: (Length of Sequence = 491 Nucleotides)

GACACCCCTC CTGCCATGAA GAATGCCACT AGCTCTAAGC AGCTOCCACT GGAACAGAG AGCCCTCAG GGCAGGTCGG  
GCCTAGGCCA GCCCCCOCG AGGAAGAGTC CCCTTCTCT GAAGCAAAGA GCAGAGGACC CACCCACCA GCCATGGGCC  
CACGGGATGC CAGACCTOCT CGAAGGAGCA GCCAGCCATC TCCAACAGCA GTGCCAGCCT CGACAGCCC TCCCACCAAG  
CAAGAGGTGA AGAAGGCAGG AGAGAGACAC AAGCTGGCAA AGGAGCGCG AGAAGAGCGT GCCAAGTACC TGGCGGCCAA  
GGAGGGCAGT GTGGCTGGGA AGGAGGAGAA AGGCCAAGGT GCTGCGGGAG GAAGCAAGCT CCATGGAGCG CCGCTGCCGG  
TTTTAGGGAG CAAAGTCTT AAAGCCGAGC AACGCCGTTC AAGCCTTGA GGAACGGCTA GCGGAAGAAG TTTGTGAAA  
ACAAGGGGCG T

SEQ ID NO:62: (Length of Sequence = 478 Nucleotides)

ATCATTGAGT ACGCAGAGCT CAAAACAGAC GTGTTCAGA GCCTGAGGGA AGTGGGCAAT GCATCCTCTT CTGCCTCCTC  
ATAGAGCAAG CTCTGTCTCA GGAGGAGGTC TCGATTGTC TCCATGCCA CCCTTCCAA ACATCTTGCC TAGAGTCTAC  
ATCAAAGAGG GGGAGCGCCT GGAGGTCCGG ATGAAAGTTC TGAAGCCAA GTATGCCCCG CTCCACCTGG TCCCTCTGAT  
CGAGCGGCTG GGGACCCTCA GCAAATCGCC ATTGCTCGCG AGGGTGACCT CTTGACCAAG GAGCGGCTGT CTGTGGCTGT  
CCATGTTGGA GGTATCCTG ACCCGATTG GAGCTACCTT CAGGACCCAT CTGGCGGGGC CACCGCCACC AATGCGTATG  
ACGTGATGA GTTTTTGAGT TCACTGCTGT GAGCGCATGA GTCTGTACT GAATCCTGTG GACAACGGTT AAGTTACA

SEQ ID NO:63: (Length of Sequence = 183 Nucleotides)

CCTGGAAGT GGGGGTGGC CAGGGGGCCA GGCCAGCAT GCACCCCAT TTTTTGGGG GCTGATCCTT GCCCCAGCTC  
TGCTGATACC CGGGCCACA CGCTCAGGCC GTTGGGGTG GAGTAGAGG TGGGAGAGCA GGGGAGAGAG CCTKAGGAGC  
CACAAITGGG CAGACAGAAG CGG

SEQ ID NO:64: (Length of Sequence = 316 Nucleotides)

GGATATTGCA CCTTACAGAC TTAGGGAGCC TTTACCAGAG ACGCTAAAA CGCCCCAGGT TCAGCCATTG TGTGAATAG  
AGTGGAAATAT AGAACCAGG ACAGAGTATT TCATTAAAG TTGATATATA CTGTCTAAGG AAACACTAAC AATACTGTAA  
CTTGTATAA GGACATAGTA TTGAAATGGG AAATAGAGT CAGGCTCACA TCATCTTAGT TTAATGCTGG GCAACTTTTT  
CTGATTCTG TAGTTCCCTG GAAAATGTGT CCTTCGTACC CATAAAGTGG TACAAATGCA TTTGTACCA TTTTTG

SEQ ID NO:66: (Length of Sequence = 411 Nucleotides)

ATCTGGTCTA GAGAGGCGAC TCCAAGCTCT CTGTCTGGCT CCAGCTGTG GGAATCCTTT AGGCTGTTC TCAACCTACA  
CGTTAAAAAT GCTTCTTGGT GTGTTGGGG AGGGGAGAG GGAACTGAG CTCTCTCTG ACCTCTCCA ACACCTTGA  
CTTGCTTACC CAGCCATTTT CAGTAGCTAC ACGGTGGTC ACAGAACT GGGCGGCACT CGGCACAAA CACAGAACC  
GGGAGTCCA TGCAGGTGCG GGAACACATG TCGACCCAG GGAGCAAGGA ACACGCCACC CCGAGGAACA TGCAACCGA  
GGAAGGATTC CCTTCAGATT CCAAGGATGC CACAACCCG ACGGGGGCT TAGGGAGGCA CCGATTATCT AAGGAAAAAG  
GCCACTGTTT G

SEQ ID NO:67: (Length of Sequence = 413 Nucleotides)

CTGCTCCTTA TGTTTTTATT TCCAAGTTT AGAATTTCTT TGCTTCATAG TATTATTTTA TTTTACTAAA TTACAGAGTA  
AGAAAGCTT TTCATTTTAT CTGATTTTAT TCTTGAACA AAAATATTAC GATCTTCTAT ATTCTGTCTC TTTTGCCAAA

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AAGTGTAGGC AATTTTACAT CATCTTTTTT CCCAATCAGT TTGTGATCCA ACTATAAAAA GGAGACATAG AATACTGAAT  
 AAATGAAACA GAAACTCCAA GGCCAAGAAG TGTCCATCTT GAAAGAGTGT TAGTGGCAAG ATATGTGACT GCAGACTAGA  
 TGTAGACAAA CCTGAGAAAA ACCAAGCATG GGGGAAAGGA TYCCTATTTT AATAAATGGT GCTGGGGAAA ACTGGCTAGC  
 CATATGTACT TTA

SEQ ID NO:68: (Length of Sequence = 372 Nucleotides)

GCACGGTTAA AAGACCAACG TGTTGGNTC AAATATAAAG GCCACACCTT TCAGACCGAA CCTACTCAAA GATCCTTTAC  
 TTTGCAATAA TTGAACTGG AGAACCAAG ACGGGAGACG AATGAAAGCA AAGATGCTCA AAGAACCAAA GGAAAGACCT  
 GAAGGAATCC AACTGCATAG GCCACGCGTT CCACTCTGGG TCAAATGCTT CCACGATGCA GAAACCTTTT TTTAAAAAG  
 TGCAAGTCTA ATTACCTACC AAGGGTAATA AAAAGCACAG CACAGGAATG ATTACAGCTG ATGGTCAAAA AACAAACCAA  
 AACCATTAAA AAAACAATCA GGCAGAAAAC AGGAGTTAAA TGTTTACATA TG

SEQ ID NO:69: (Length of Sequence = 389 Nucleotides)

TCTAGAACCT GGACCCACCC AGCGCGTCTT TTCTTATCCC CGAGTGGATG GATGGATGGA TGGATGGTAG GGATGTTAAT  
 AATTTTAGTG GAACAAAGCC TGTTGAATGA TTGTACATAG TGTTAATTTA TTGTAACGAA TGGCTAGTTT TTATTCTCGT  
 CAAGGCACAA AACCAGTTCA TGCTTAACCN TTTTTCCTT TCCTTCTTT GCTTTCTTT CTCTCTCTC ATACTTTCTC  
 TTCTCTCTT TTTAATTTT TTGTGAGATA ATATTCTAAG AGGCTCTAGA AACATGAAAT ACTCAGTAGT GGATGGGTTT  
 CCCACTTCTC CTCAATCCGT TGCATGAAAT AATTACTATG GTGCCCTAAT GCACACAAAT AGCTAAGGG

SEQ ID NO:71: (Length of Sequence = 329 Nucleotides)

GAAAAAATGG GAGGGCAGCC ATGTATTAAT TGTACATCCA AGGAACTGT GCGCCAGGGG TCTTGTGTGT ATTTCTGAGA  
 AGAGGGGTGA GAAAAGGCAC TGTTGTCAACA TTGCTTCTG CCTGAACGTG CACCTCCAG TGCTCTCCA TCAATTAGGA  
 GAAGTGTCTT GAAGAATGCT GCCTCAGCTT CTGAAGAGAA GACCCAGGA CATGCATTAA TGAGAGGAGG GGAGTCACAG  
 CTGCAGAAGA ATAAAGCTCT CTGAGGGAGC CTGGGNGCCC CAGTGGAGG CCTGGAGCTT GTTGACCANN GCAGCAGGAG  
 ACCCTGCT

SEQ ID NO:72: (Length of Sequence = 418 Nucleotides)

CTGAGTTGCC TGAGGTCATT CACATGCTTC AGCACCAGTT CCCATCTGTT CAGGCAAATG CAGCGGCTA CCTGCAGCAC  
 CTGTGCTTTG GTGACAACAA AGTGAAGATG GAGGTGTGTA GGTAGGGGG AATCAAGCAT CTGGTTGACC TTCTGGACCA  
 CAGAGTTTGG GAAGTTCAGA AGAATGCTTG TGGTGCCCTT CGAAACCTCG TTTTGGCAA GTCTACAGAT GAAAATAAAA  
 TAGCAATGAA GAATGTGGT GGGGATACCT GCCTGTGTG GGCCTGTGAG AAAAATCTAT TTGATGCAGA AGTAAGGGAG  
 CTTGTTACAG GAGTCTTTGG AATTATCCCT CATGTGATGC CTGTAAAAT GACATTCAIT CGAGATGCTC TCTCAACCTT  
 AACAAACACT GTGATTGT

SEQ ID NO:73: (Length of Sequence = 336 Nucleotides)

CTGAATTTTT ATATGCTTCA CTAGGCTTT CATTGAGTA GACTCTAAAA ATTCTGCCTT GCTTAAGTNC TAACACTGCC  
 TCTCAGATTT CAGTTTGGG CATTGCACAA CTAAGACCTT TTAAACGCAT TTCTTGCTA ACTCGGAAGA CACATAGTCT  
 GCAGCAAGAC ATTCCTATAT TGAAGAAATG AGAGAAAATT TTATGCTGCA TCAGGTGGAG AGCAAGGCTC AACGGTGGTT  
 GCATTAGTTC CCTCGGAAGT ATTGAAAAAN CTTTGAAATG GGAAGGAAAA TTTTTCAC CTAATGTTCC TGAGGTACCC  
 AGAATGCTG GGGGT

SEQ ID NO:74: (Length of Sequence = 402 Nucleotides)



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GTGCTCAGTA AATACAAATT GGATGGACTA GAGAGATAGC CCGAGGACA CTGCCAAATA AATAACAAAT TGTGCAAGCA  
 GCAGGCGGCT GTAATTAGAC CAAGGAGGAC AGTCAGTTAT TAATATCAGA CACGTGGCAG GGTAAACAGC CACTGAGGGT  
 GGGTACAATG AAGAGAGTCA CTTTCTGCAC CCTCAGGGAC TTCCCTTGTG ATGGCCTTCT AAAGAGGGCT GAACAGCACC  
 AAGTGGCCCTC GCTGCCCTCG GTTCTGCTG CCTCCGGGT GCGTTGGGTG CCCCACAACT AGGGCCCTGG GTCCCTCCCA  
 TGTCCCCCTC CCTCCTACAA CCCCACAGCC CCTTATCTGG CCAGCCATTA TGATGCCTAT CAGTATGAGG CCAGATGAGA  
 GT

SEQ ID NO:75: (Length of Sequence = 454 Nucleotides)

GGACCCGGG CCGCGATGT GSCCCAGTAC CTGCTCTCAG ACAGCCTCTT CGTGTGGGTT CTAGTAAATA CGCCTTGCTG  
 TGTMTGATG TTGGTGGCTA AGCTCATCCA GTGTATTGTG TTTGGCCCTC TTCGAGTGAG TGAGAGACAG CATCTCAAAG  
 ACANATTTTG GAATTTTATT TTCTACAAGT TCATTTTCAT CTTTGGTGTG CTGAATGTCC AGACAGTGGG AGAGGTGGTC  
 ATGTGGTGCC TCTGTTTTC CCGACTTGTC TTCTGTCACC TGATGGTTCA GCTCTGCAAG GNTCGATTG AATATCTTTC  
 CTTCTGNCCT ACCACGGCGA TGAGCAGCCA CCGGTGAGT CCGTCCCTG TTTGGTTGCC ATGCTGCTTT TCTGCTGTG  
 GACTTGCGGC CGTTTGCTCA TTACGGGTA CACCACGGAA TGACACCTG GCTT

SEQ ID NO:76: (Length of Sequence = 313 Nucleotides)

GCTTTGATAG CTAGTGTCT AAAAGTCTG NTATTAAAT AATCCACCTN TTTCCCACT TAAACATCC CTCTTACCAT  
 ATACTAAATT CCGTAGCCC TGGGTCTGT TCTGGACTCT CCGTCTGTC TGACCCCTC CAGGTACAC TGAGTGAGGT  
 AATGGTGGG TGAGAACTCT CTGGGAATCT GGCAGGNTCA CCGGAGCA GTCCACCCN CAACTCATT AATCGTTCA  
 GAGTGGNCTG AGTGTCTCA CACATTCCT CTGCCAAATG CACTTTAGGA ACTGTCAAT TCCAAAGTTT CAA

SEQ ID NO:77: (Length of Sequence = 446 Nucleotides)

CTCAGCCGTA GCCCTAAGTC GTTTTCCAA TTAGGAAGC TCACAACGCA GATCTGCAIT GTCACTGACC AGCTGTGTGT  
 GAACCTTTGT AAGCTGTTC AGGTGTCTT CAAGAAAGGA AATCTTCTG TTTTGGGAGT GAATCCCCC ACTGTCTTCG  
 GGCTCCATTT CTGCATTTT CTGACTCGA GTGCTGAGT CTGAACGAA CAGCTTGOA AGGTGTGGC SGGTCTGGAG  
 TTCCGGGCA ACTGTCTCT CCAGACCTT GAGGTCTGCT TGTGACTGC TCAATGTGCG TCGTACAGAA ATGTGAGCTC  
 CTGCGCTTT GGTGCTCTT TGTGTTCT TCGCTCTTC AGCTTCTCG TAGTCAAGCC TGAAGGCTT TCTAAGCTCT  
 AACTGGAGCT TCTGATTAA GTCTTTTGA GCTCATCAA TGGTCT

SEQ ID NO:78: (Length of Sequence = 296 Nucleotides)

AGCCGGTGGC GCAATGGAGA GAATGTGCT GAGACAGAGC GCGTGGCTGG GGAGGAGGCA GCGCTGGNG CCGAGCTCTG  
 TGAGGAGACC CCGTGAATG ACAAATCATC CATGTGGTG CGCATCGGC CCGAGGAGG GCAGAAATAC GAGGAGGAGA  
 TCGCGCTCT CTATAGCAG CTINACGCA AGGATGATGA AATCAACCAA CAAAGCCAAC TCATAGAGNA GCTCAAGCAG  
 CAAATNCTGG ACCAGGAAGA GCTGCTGGTG TNCACCGAG GAGACAAGA GAAGGT

SEQ ID NO:79: (Length of Sequence = 285 Nucleotides)

CCTTCTCTG CTGGGAAGTG ATGACTGCA GGTGGGCTT GCGCTGGGG GCTCCAAGCT GGTGCTGTG GGTAGGTGGG  
 GCGGAGACT TGGCAGGAT GACCTTGTG AGGTGTGTG CATTGGCCAC AGGGAGGAG CCAGGGGAAG CCGAGCACT  
 GACGTAGCCA TTCCCAACAG GGCTGGGCA GGCTCCGTTA GCCTGTCTA GGTCCCNCC CAGCATGGCC  
 CCGCACTACGCTG GGGCAGGCCA GGAGACACAC TGTCTCTG TAGTG

SEQ ID NO:80: (Length of Sequence = 402 Nucleotides)

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ATGATTTCCTT GCGTGINATA ACCTATGCAC TCACAAAGAT GAACTCTCTG AGAGGGATGA GCAAGAGCTT CAGGAAATCC  
 GAAAGTATTT CTCCTTTCCT GTATTCTTTT TCAAAGTGCC GAACTGGGC TCGGAGATAA TAGACTCCTC AACCAGGAGA  
 ATGGAGAGCG AAAGATCACC GCTTTATCGC CAGCTAATTG ACCTGGGCTA TCTGAGCAGC AGTCACTGGA ACTGTGGGGC  
 TCCTGGCCAG GGATACTAAA GCTCAGAGCA TGTGGTGGGA ACAGAGTGAA AAGCTGAGAC ACTTGAGCAC ATTTTCTCAC  
 CAGGTGTTAC AGACTCGCCT GGTNGATGCA GCCAAGGCC TGAAACCTGG TGCACTGCCA CTGCCTTGAC ATCTTTTATT  
 AA

SEQ ID NO:81: (Length of Sequence = 246 Nucleotides)

CATTTTAAAT AGAGACGGG TTTAACCATG TTGCCAGGC TGGTCTTGAA CTCTTGATCT CAGGTAATCC ACCCACTATG  
 GCGTCCCAA GTGCTGGGGT TACAGGTTTG AGCCTCTGTA CCGGCCCGG CCAAAGACTG CCTATTCTAA ACGTTGCTGA  
 GGACGTGGAN CAATCAGAGC TCTCCINTCT TTCCAGTGG AGTTTAACAT GGCACAACCG CCTGAAAACC GTTTGGNGAT  
 TTCTGT

SEQ ID NO:82: (Length of Sequence = 394 Nucleotides)

GGGAACCTC AGCAAAATAT AATGGTACCG CTATTATCAG CCTTGTTTGA GGCCAGGGA TTTTGGGGGA GTTCACAGTG  
 TTCTGGAGGA TATTCCTCC TTCCGTGGG GAATTTGCTG AAACATCAGG NAAACTGACA ATGCGAGAGC AACAGTCTGC  
 AGTCATTGTA GTAATACAGG CTTTGAACGA TGACATTCCC GAGGAAAAA GCTTCTATGA GTTTCAGCTC ACTGCAGTCA  
 GTNAGGGAGG AGTTCTGAGT GAATCCAGCA GCACTNCCAA CATCAGCGTG GTGGCCAGCG ACTCTCCCTA TGGCCGATTT  
 GCCTTTINAC ATGAGGCAAC TCGAGTGTG AGAAGCACAG AGGENTAACA TCACAATCAT CCGTTCAGT GGAG

SEQ ID NO:83: (Length of Sequence = 308 Nucleotides)

ATAAGACCAT TGGCAAAGG AGAATTCATG AACTGAAAGA TCTGAAGTAA TTTCCAGAA TGTAAATGTA AGAAATAAGT  
 TAAAAGGCAG AGCATAATGA GTCTAACATG TGTGATTGAA GTCTTATAAG GAGAGAATTA AGAMCAGGCA ATATTTTAAA  
 GGRATAATGG AGAAAATGGA ATAATTGATG AAATATGTGA ATATATATAG GGACCATATG CATATGAMGG CCGGGGGTTA  
 AATAAACGA AATCTACTTG TACATACITT ATGGGATTCC TGCAGCCCGG GGGGATCCAC TAGTTCTT

SEQ ID NO:84: (Length of Sequence = 313 Nucleotides)

CTTTAACTTA ATGGCAATTA AACTCACTG GCAAAAAA TCACTAGAGA TGTCACTCCA TTATCTTACC AAATAGTGTA  
 TTTTACCAT CTTTACCTA CACCTTGAG TAAGTGGA TAGGTTAAAG TTAAGTGCAT AATAACACTT CATTGAATTC  
 ATGATAGTAT TTAACATGTT AAACTGTTT AGTTGAAAAG TTCACATGCA ATTTATAATT TAAAAATATG CTACATATAT  
 TTCATAAAW TACAATAGGT CACTACTARAC TTTGACTAAA ATTAAGAATG TKTTTCTKTC ATAATAATGC AGG

SEQ ID NO:85: (Length of Sequence = 303 Nucleotides)

TGCTCGTTT ATTGCTCTAT TCAATGACCA CGAGCGAATT ATAAAAAGAC ACCAAATGTC TCTGTCTGCC GTGGGATAAA  
 TATTTAAAGT CAGCAATAAA GTCAAGTGGC TCCAAGRTAA TACATGTTGC CAAAGAGTCA TGCATGCCCT CCTGATGGGC  
 TCTCAACACA CGTATGGWCA TGGGAACACA CGCAGAGCAA CAGCAGTAT GAACTTSTGG GAAGGCTTTA CCACAGTGAC  
 ACAGTAAAT GTCTCACTA GATCTGRGCT GAGTCCCCAC CCAAACCTTG AGCTCCCTT CCA

SEQ ID NO:86: (Length of Sequence = 380 Nucleotides)

AAAACAAACC AGCTTTAATA CCAATATAGT TCTCTCTTAA ATACCGTGT TCCAGGACA AATGCAGGGG CAGGCTCTTG  
 GCAGAAAGAG TAGAAAGGAA ATGTGGAACA AAATGGAATG GATGGCCAG GCCAGGGTC CCTGCCTTGG GCACTAGGGA  
 CTGGGCTGCC TCGGGGATGG GGGAGTGACA GCAGTCCCC CTGGTCCAGT TATTGCAGAG GGTGGGGG CTCCCTCCC

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TCCCCAGGCC TGAAACATTT CTCAGGATTA CTTCTGACCT TCAGCCCCAG CAGGGCCAGG GCCTGGGCTC CTCCTGGTCTA  
GGATGGGCCC CTTTGCCCAA AAGGGCCTTC AGCTAAGGCG TTGGGTGGG CGGGGAGCCC

SEQ ID NO:87: (Length of Sequence = 280 Nucleotides)

GCCTTTGCTG CTTATTGCA TOGATGGTGA AAGAGATGTC AGGAGCACTT CTCTGCTGAG GTGGCTGAGA CGAAGAGGAC  
TCCTGCTGCA GCCTTGCCG ATACCTGGCA ATTAGCCTGT GTTCTTCATC AAGCCGGTTT GAACTCTCAA GCATGCTCCT  
GGTAATAAAA GGACTTCCTG AGGAGGGAAC AGAGTGNAG AACAGGGTGT CGTTCATGCT GGTTACAGGT CTGGGAGGCA  
CGATGTGAGC CRAGTTGAGT GGCTTCTCAG GCTGATCTGG

SEQ ID NO:88: (Length of Sequence = 446 Nucleotides)

CCTGGTCTC TTACACCCYC TCCCACCCGA GGCTCCCCAG AGATAGCAGA GAATTCGAAG AGGTGCCCCG GGACTGGAAA  
GAAGTCCCG NAGGCCGCT TCGAGTCTA CACCCAGCC TGCTTCCCAG CCTACAYCA GACCCAGCTC AGACCTTCGT  
GACACCCCA TCCCTTCTC CGGCTGGCTG GGTGGGGG ATCCCTCTCT GTGCTGGCT TCCAGAGGCA GGACAGGCT  
CCTGGTAAGC CGCAAAGTT GCTGACCTCC TGACTTGTG TGCTTTTAT TAATATCTGT ATTGCTGATA ACGTGTCTCT  
TGACTATGTG TCCAGGTCA TGTCCAGGT CATGGAGAAG CCGTGCCAC AGTGACCTT CCCATACTTC TGGGGGGGCT  
GCTCTCCATC TGGATGCTAG GAGGATATAG GTGTGTCTG GACCAT

SEQ ID NO:89: (Length of Sequence = 384 Nucleotides)

GTCCCTCTG GGGACTCTRT TTCCCATTT ATTGCTGCTG TGTCCCTNAC CAGTTCCTTG CAGGATTCCT TCCCTTTTAA  
ATGCCCTTAA ATCTAGCTTT GCCTTGGAGA CCCAGTGGG TGCTGCTCCT GCGTTTTCT TCTGCCAAAG CCTGAATCAA  
TGTTTCACT CCAACCTCT GCCAGTTGG CCOCTCAAAG CTTGGTGGCT CAAGACTGTW AGCCTGGCAG AGCCGCGNGG  
TGAAGGGAGA AGCTCTTGA GCAGGCAGGA TGCCACCGCT GCTTCAGCTT GCTCCTGCG CCAGCTACCC TTTGGCCCCA  
TTGGGCCCTC GIMTGCTCT CCAGGATTGT ATGTTTCAAG NCTTGCTCTG TGTTCCTTTG TCTG

SEQ ID NO:90: (Length of Sequence = 344 Nucleotides)

TCAAGCTGGA AAGGGCTACT ACCTCATGCT GGAAAGGGCT ACTACCTCAA GCTGGAAAGG GCTACTACCT CAAGCTGGAA  
AGGGCTACTA CCTCAAGCTG GAAAGGGCTA CTACCTCAAG CTGGAAAGAG CTACTACCTC AAGCTGGAAA GGGCTACTAC  
CTCATGCTGG AAAGGGCTAC TACCTCAAGC TGGAAAGAGC TACTACCTCA AGCTGGAAAG GGCTACTACC TCAAGCTGGA  
AAGGGCTACT ACCTCAAGCT GGAAGAGCT ACTACCTCCA AGCTGGAAAG GGCTACTACC TCATGCTGGG AAAGGGCTAC  
TACCTCAAGC TGGACAGGCG TACT

SEQ ID NO:91: (Length of Sequence = 364 Nucleotides)

GCCCCAGGGT GAGGGCTATG AGGGGTCAGG GGTCAAGTTC CCCAGGACCC TAGTCTTGT CCGCTTCCCT GGTGCTAAAT  
AAAAGTGAAT AATACTAAA TAAATACAAC TGGGGCCAG GCGCTCCCTG CCTTCCCGCT CCGTCTGTG ACCCGCAGCA  
GAGGGGGCAG TTTAGATGGA GGGCTGTCTG TCAGCCCTT CCATCCACTA ACCCATCACT GCGTCCAGG GCAGGAAACC  
AGGGCAGGCG CAGCTGCGC ATTAGGGCAG AGAGGAGGGG CAGGTCTCAC GCGCACAGCC CCTTCCACT TGAGTCTTAG  
CATGAGGCAG CAACAGAAGC TCTCTCTTC TCCAGCTAA GTCC

SEQ ID NO:92: (Length of Sequence = 218 Nucleotides)

ATTAAATAGA AAATTAAT AATAATAAT ATGAAATGA GTGATAAGC TGAGCTGGG AGGCCAGGC CAGTCTAGTA  
CAAGTTAAG GAGGTAGGA GGATGGTGGG GAGGAGGGG CGGACTACCC TGCAAGAGC GGGAGGCTGC TCAGACTGTG  
GTGATGTGAG GAAGGGCCG ACACCTTGGC ATGGACGATG CACTAAAAA AGAGAAAG

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SEQ ID NO:93: (Length of Sequence = 364 Nucleotides)

GCTTTCAAGG GAACAAAGAA TCGGCCTGGC AGTGCCCTGG AGAAGGAGGT GGAGAGCATG GGGGCCCATC TTAATGCCTA  
 CAGNACCCGG GAGCACACAG CTTACTACAT CAAGGCGCTG TCCAAGGATC TGCCGAAAGC TGTGGAGCTC CTGGGTGACA  
 TTGTGCAGAA CTGTAGTCTG GAAGACTCAC AGATTGAGAA GGAACGTGAT GTGATCCTGC GGGAGATGCA GGAGAATGAT  
 GCATCTATGC GAGATGTGGT CTTTAACTAC CTGCATGCCA CAGCATTCOA GGGGCACACC TCTAGCCCAG GCTTTGGAGG  
 GGCCCACTGA GAATGTCAGG AAGCTGTCTC GTGCAGACTT GACC

SEQ ID NO:94: (Length of Sequence = 423 Nucleotides)

CTTCATACTA GAACTGTCTG CCATCTTTAT TTCTTTGTTT TCAGGAAAAT TGGAGAGAAA AGTATTTCTT TTTTAAAAAT  
 GATTATTATA CTTAAGTTC TGGGATACAT GTGCAGAACG TGCAAGTTTG TTACATAAGT ATACACGTGC CATGGTGGTT  
 TGCTGCACCC ATCAACCCGT CATCTACATT AGGTATTTCT CCTAATGCTA TCCCTCCCTC AGCCCCCACC CCTCCAACAG  
 GCTCCAGTGT GTGATGTTC CCTCCCTGTG TCCATGTGTT CTCATGTTC AACTCCCACT TATGAGTGAG GGACATGCAG  
 TGTTTGATTT TCTGTCTCTG TGTTACTTTG CTGAGAATGA TGGCTTCCAG ATTCATCCAT GTCCTTGCAA AGGCATGAAC  
 TCATCCTTTT TATGGCTGCA TAG

SEQ ID NO:95: (Length of Sequence = 405 Nucleotides)

AACAGCCCC GATCTGCATA GCTGTGAAA GCCACGGGG ACATCAGTAA CCTTCTGCAG CCACCATCCA ATGCCATTAC  
 TGINAAGTGA GACTTGCCA CTGTAGCTG GGCTGCTGC AGGAGCTCTT CAGAAAGGCA CATGAGGACC ACGTTTGGC  
 TCAGTTTCTG GTAAACACA AGGTCTGGAG TGCCCTGCA AAGGGTATTG ATGGACTTCC TGCCAGTGAC AGAGCATGTC  
 TATTGCAAAC AATTCTCTCA GTTACGTTCA GCACITAAGA ACGCTAATG NCAATAGGAT CTTAGCAAC TTTTTCACAT  
 CATAGAAGGT GCAATGCTC ACTTGGGAAC ACTACTGAGA GTGACTTCTC TTTTAAAATT GAGTAGCAGA TGAAAAATTA  
 AAAT

SEQ ID NO:96: (Length of Sequence = 173 Nucleotides)

GAAGACAATA CTGATGCCAG CTCCTTTGTAA TTGTGAAATC TGTACCCAAA CCTCTGGATT AGAATCTCCA GTGTCTACT  
 GTAAATACTG GAATTACAGC AAAGGATATG GGGACTGGGC TGCTTTTCTG TATTGTACAA GCACTATTCT AGATATTAAA  
 GAAATTTAAC CGC

SEQ ID NO:97: (Length of Sequence = 337 Nucleotides)

ATGGCGCCCT ACAGCCTACT GGTGACTCGG CTGCAGAAAG CTCGGGTGT GCGGCAGTAC CATGTGGCCT CAGTCTGTG  
 CCAACGGGCC AAGGTGGCGA TGAGCCANTT TGAGCCCAAC GAGTACATCC ATTATGACCT GCTAGAGAAG AACATTAAAC  
 TTGTTGCAA ACGACTGAAC CGGCCGCTGA CCTCTCGGA GAAGNTTGTG TATGGACACC TGGATGACCC CGCCAGCCAG  
 GAAATTGAGC GAGGCAAGTC GTACCTGCGG CTGCGGNOGG ACCGTGTGGC CATGCAGGAT GCGACGGSOC AGATTGGCCA  
 TGCTCCAGTT CATCAAG

SEQ ID NO:98: (Length of Sequence = 212 Nucleotides)

TGAAGCCCAA GNAGTNTGTG AAGACAGAGA ATGACCACAT CAACCTGAAG GTGGCCGGGC AGGACGGCTC CGTGGTGACG  
 TTCAAGATCA AGAGGCACAC GCCGCTGAGC AAGCTGATGA AGGCTACTG AGAGAGGCAG GGCTTKTCAA KGAGGCAGAT  
 CAGATTGAGK TTCGACGGGC AGCCAATCAG TGAACTGAC ACTCCAGCAC AG

SEQ ID NO:99: (Length of Sequence = 26 Nucleotides)

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CCTTTTAATA ATAATTCTGC TGTCTGCTGT GTACTAGAAC CCATGCCTAC TGCTTGGGGT ATAATGTAGT AAATGTAGTA  
 AAAACAATAT CCGCGGGGCG CGGTGGCTCA CGCCTGTAAT TOCAGCACTT TGGGAGGCCA AGGAGGGGCG ATCAAGAGGT  
 CAGGAGAGCG AGACCATCCT GGCTAACATG GTGAAACCCC GTCTCTACTA AAAATACCAA AAATTAGCCA GCGGTGGTGA  
 TGGACGCCTG TAGTCCCAGC TACTC

SEQ ID NO:100: (Length of Sequence = 333 Nucleotides)

AAAATGCTCA CAGTGGTCTT CTCTGGCOGG TGAGCCTACA GCTGATCTTG TCAGAGACAA ACGTAGTTT TACTGAGTCA  
 CCCAGAGCCC TGTGCTGGTG CCTGAGGGTT TGTTCATGG GACAGTCTCC ACAATTCTC TGGGAAGGG CCACAAATCC  
 CACAGTGTGT CCAAGAGGG CTGGAGTAGG CGGAGTCCC AGCAGCTGTG GCATGACCAG CCATCTCTCT CAAACAATT  
 GTTACAAGC CTTCTGCAAG TTAAGGTTCC ACATGGTAGC CGTGGTACAG AGGCATTCT CTAGGGTGG AGAGGCTTGT  
 GCTCTACCC AGG

SEQ ID NO:101: (Length of Sequence = 156 Nucleotides)

CTCAGACTTT CCTGTGGNTT TAGAGCCAAG CTCAAGGTAG TAGGCGGTAG GGNCTTATTT TATTTTCAA CCCCCATCCT  
 CAGAGCGCAG ATACATGCAG AGGCTTCTGC CAGGCTACCA CGGGGCTTGA GTGGGAACAG GTTGAGACCA GCATT

SEQ ID NO:102: (Length of Sequence = 331 Nucleotides)

CGAAAGGGG NNNTATGGCC ATCTTTTATC AGAAAAAGTG ACAAACGGG AATTTAAAA ATGAATTTTC NNTCTGACTT  
 TATTNNAAA TACACTTTCT TTTTNNAAA ACCAATACAC TTTCTTTGAG GATGACAGTA TTAGGAAATC CAATTNNACA  
 AAAAATACTA CATCTAGTCT GGGGTAGATA TATTTATTTT TGGTAACATA CATTAGTGG CACTAATTAC ACAGTAACTA  
 TAAGGTAACT AACATGAAC CACAGAACTG TAACTCTGCC ACAGCTGCAT GAACTTGGGC TTTTCTGGTT GAGCCATT  
 TCAAAAACT G

SEQ ID NO:103: (Length of Sequence = 316 Nucleotides)

AGCCACTGCG CCCCACCCCA TTTCGGTGTN ANCTCAGCTC ACTTCAACCT ACCCTCCCA AGTTCAGTG ATTCTCTAC  
 CTCAGCCTCT TGAGTAGCTG GGATTACAGG GGTCTGCCAC CAGCTGGGT GATTTTCTTA TTTTAGTTG ACATGCAATT  
 TCACCAGGTT GGCCAGGCTG GTGTTGAACT CCTGACCTCA GCTGATCCAC CGTCTCGGG GTCCCAAAGT GTTGGGATTA  
 CAGGTGTGAG CCACACACC AGGCCATAT TTTCTTTAG ACATGCAGGC AATGTTGGTG GGTGTGTCTG TTAAGA

SEQ ID NO:104: (Length of Sequence = 308 Nucleotides)

GTTFITCTG CATCTATGA GATAATCATG TGGTTTTGT ATTGGCTCT GTTATATGC TGGATTACAT TTATTGATTT  
 GCGTATATTG AACCAGCCTT GCATCCAGG GATGAGCCC ACTGATCAT GGTGATAAG CTFTTIGATG TGCTGCTGGA  
 TTGTTTTGC CAGTATTTA TTGAGGATTT TTGCATCAAT GTTCATCAAG GATATTGGNC TAAAGTGTG CTGTATTCAG  
 GAAACCCATC TCAGTGCAG AGACACACAT AGGCTCAAAA TAAAGGGATG GAGGAAGATC TACCAAGC

SEQ ID NO:105: (Length of Sequence = 355 Nucleotides)

GGCCTTCTC AATATGTAGG CGCCACTTTT TCTCCCTGTG CCTCACCTG GTCACCCCTC TGTGCGCGAN ATCCCCTGT  
 CTCTCTGGGT GTCCAACTT CCTCTCTTA GGAGGACACA AGTCAGATTG GATTAGGGCC CACCCCAATG GCGTCATTT  
 AACTAATCA CTTCCCTTT GTTGGGCTT TTTAACTTAA TCACCTCTTT AAAGACCTTA TCTCCAATA AGGTTTCATT  
 CTGAGGTATA CTGGAGTTA AGACTTTTAA ACAGGAATTT GGAGGGGACG TAATTCAGCC CATACAAATA ACAATAATGA  
 CATCTTACAA CTACTGCCA CCACCAAGCT TGCTG

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SEQ ID NO:106: (Length of Sequence = 355 Nucleotides)

GGATGAGGTC GCCGGGATCG TGGCTGCACG CCACTGCAAG ACCAACATCG TCACAGCTTC CGTGGACGCC ATTAATTTTC  
ATGACAAGAT CAGAAAAGGC TGGTCATCA CCATCTCGGG ACGCATGACC TTCACGAGCA ATAAGTCCAT GGAGATCGAG  
GTGTGTGGTG ACGCCGACCC TGTGTGGAC AGCTCTCAGA AGCGTACCG GGCCGCCAGT GCCTTCTTCA CCTACGTGTC  
GCTGAGCCAG GAAGGCAGGT CGCTGCCTGT GCCCCAGNTG GTGCCCCAGA CCGAGGACGA GAAGAAGCGC TTTTAGGAAG  
GCAAAGGGCG GTACCTGCAG ATGAAGGCGA GGGAC

SEQ ID NO:107: (Length of Sequence = 273 Nucleotides)

GIGTCTCTTT TAAAGAAAAC ATACTTTATT TTGGTCTAAA TTGTGAAAAT ACCCAAAACA TTGATAGAA ATTGAAGTCT  
GTCAACAGTG TTTTATATAC TAAGATCAGG ACAGTTCCTT GAGATCATAC TGTTTTATTA CTAAGTTTGG CCTTGTGTTT  
ACAAATGTAA TGTTCATATT TATTGAATT TTAAGATTGG TTAATGTTA ATGAAAAGCA ATCCAATGTG TANTTTTAG  
TAGTGCTTT TCTCTGTATG CCTTAATTTT ATT

SEQ ID NO:108: (Length of Sequence = 359 Nucleotides)

ATTTTATTTT CTACATCGA AGAAAATGTT AAAGAGTATC TGCAGACACA TTGGGAAGAA GAGGAGTGCC AGCAGGATGT  
CAGTCTTTTG AGGAAACAGG CTGAAGAGGA CGCCACCTG GATGGGGCTG TTCCTATCCC TGCAGCATCT GGAATGGAG  
TGGATGATCT GCAACAGATG ATCCAGGCCG TGGTAGATAA TGTGTGCTGG CAGATGTCCC TGCTCGAAA GACCACTGCA  
CTCAACAGC TGCAGGGCCA CATGTGGAGG GCGGCATTCA CAGCTGGGCG CATGAAAGCA GAGTCTTTTG CAGATGTAGT  
TCCAGCAGTC AGTAAGTGG AGAGAGGCCG GGATGAAGG

SEQ ID NO:109: (Length of Sequence = 360 Nucleotides)

TTTATNAAAG CAGTTAACT TAGCATTAAG TAACACTCTT TAAATGGTAC ACCTATGAAG CAAGAGTTAA ATATAAACC  
AGTCTAATCC TGTACACTTG TGATTAATTG TGACAATCTT AAGTTGCTCA CTCTTTCCC ATTTACCAAT TCAGAGAAAG  
CCCGTTTCTT GTTTTCTCTT CACCACTTTG CCTTGGCATC ACACCAACCC TGCTCGGGC TTCAGCTGCA GATCTCCCC  
AGCCCCCTCT CCCAGCTGGG CTGACTCCAG TCCCAGCCCC AGTCTCCACC AACTGAGCAG CGTACGCAGG GTTGTGTCTG  
GCTTCAGCA TCTACCAACC CTTAGAGCA ACTT

SEQ ID NO:110: (Length of Sequence = 364 Nucleotides)

TCTCAGAGGG GCTCTGGGG TCATTCAAGG GGGACTCTTA GCTTCTCTT GGAACCTTT GTCCAGAGCA AAGCCAGGTT  
TCCAAGGTCC CCACGGCAAG GCTGTGGGT GCTGGCAGCA AGAGGTACAC AGCAGTTCTC CCAGCTCACA GCAGTGACCT  
CAGATCTCCA GCAGCAAGGG CCGCACTCTC GTGCCACAA GGGCCTTGA GAAATNCTCC GGTCCCTGGG NCTCCCCGG  
CAGGAGGGGC GGGGCTCTG CCTGCAGTGA GGCCACAGCA CTAAGCGCT TCAATCACAT GCTTTTCAGG TGAATCACTC  
CAAATTCAGT GAGGAGGGCC ACGACAAGGA AGTTCAGGTA GAAG

SEQ ID NO:111: (Length of Sequence = 455 Nucleotides)

TTTTTTTTT TATATTTTAA ATGGAATTTA TTCTATCAAC TGCTGAGAG GACACAATGG GGGAGGGGCT TCGGACCACA  
GCAGGAGCCC CGACTGCCCA CCTGAGGGCA GGGAGAGCCT GACCCCATG GCCAGGCC TGGCTCTGTA ACCATTAACC  
TCTTCCCCCA ACTAACACCA ATGAAAACAC CATTCCAGT GACTGGGCTG TGTGTTTGGC TCTGTGACAT GGGGACCCCT  
GACCTAGGG GTCTGCGCTG AGCCAGACCT GAGGGACCA CCCGCTAGG ATGGAGGAAG GTTTAGGCCT CCTTTTGGC  
AGCTAACCC GGGGGGTGGG GCAGACCTG GGAGTGGGCC TTACAGACCA GCCACAGGTA TTTTATAGGC AATTGACAC  
ATTTTATTAC AAAACAGTC TACATTCATT CCTAAAAGG TCATTTTCAG TAAA

SEQ ID NO:112: (Length of Sequence = 398 Nucleotides)

CTGATCTGAC AGGAGGTGTA GGTGAGGAG TAATGGAAGT SATGGGGAAC AGCTGTAAAT ACAGATAAAG CTTTACTCAC  
TOGCCCCACC ACTGCTCATC TCCTGCTGTA CTGCCCAGTT CCTAACAGAC AGCAGACAGC TACTGGTCTG TSGCCCAAGG  
GTTGGGGACC CCTGACATAG ACTAAACAAT TCACAATGTT TATATTAAAC AACTTATTCC AAGTTTCCAT TTTAGACTCT  
GGAACATCTG ACATGGTGAA TCCACAGGTA GTAAATSGGA AGGGAGATAA CAGACAACCT GACGGCCGTG GAAGACGCAC  
TGGGCGGGCA CTGGTGACGG GTCTCGGGAC AGACTTCACA TCTCCAGACT GGCACAGTGG GCTCACACCT GCCTCCCA

SEQ ID NO:113: (Length of Sequence = 444 Nucleotides)

ATCAGTGTCA GTGTCTAACA GAAGGGTCTG TTAAGGATGC TTCGTATTTA ACCAAAAGAT TAAGCTTCAG AAACAATCTA  
ACATACTCAA AGGAGCACCA AATTATCAAC CGCTACAAG GATGCAAAGG ACCTAAACAA CAGATGTCAA AGGGCTTGTA  
AAAAGTGGAG CCAGCAACCA TTCCACTTGA AGGAATCCAT CTCAGGGAAA TGCTGGAATC CACACACAAA AGCAGGTGTG  
CAATAATCA CTGCAGCAGC CTTTCTAATA GTGAACAACA GAGGCAATCC AAATATCCTT CAACAGGGAA CTGAGTAAAT  
ACCAACTATG GGCATATCCA CATAAGGCTC TCTGCAGTCA TTTAAAAGGA TTGCACTTAC ATGCATGTCT GCCATGGAGG  
TCTTTCAGGC CAATGGTTCC ACTGGGAAGG GCAACACCA ATTA

SEQ ID NO:114: (Length of Sequence = 472 Nucleotides)

TCGGGCCCCA ACGGAGACCT GGGGATGCOG GTGGAGGCOG GAGCGGAAGG CGAGGAGGAC GGCTTCGGGG AAGCAGAATA  
CGCTGCCATC AACTCCATGC TGGACAGAT CAACTCCTGT CTGGACCACC TGGAGGAGAA GAATGACCAC CTCACGNCOC  
GCCTCCAGGA GCTGCTGGAG TCCAACCGGC AGACACGCTT GGAGTTCCAG CAGCAGCTCG GGGAGGCCCC CAGTGATGCC  
AGCCCTAGG CTCCAAGAGC CCCCACCGG GACCCAACCC TGCTCCCTG GGGCTAAGCT CTGGCCTGGG GCACTCACCC  
CCTGGCTTAG ACAACTTCTC AAGGGCTTGG CCTTCAGGGG ACCCTTGTTG GTCTTGCTT GCTGGGGCCA CCTTTTCTTG  
CTTGGGGCTT CCCCTTGGC CTACCTTGGG GCCAAGCCCC TACCAACTTT GGATTGCTT CTGGGGGGCC AA

SEQ ID NO:115: (Length of Sequence = 293 Nucleotides)

CTNGGGGCCA TGTGGCTGAT TTCCATCACC TTCCTTCCAT TKGCTAOCGC GACATGGTGC CCCACACCTA CTGOGGGAAG  
GGTGTGTGCC TKCTACTGG CATCATGAGA GCTGGCTTTA CCGGCTCTGT GGTGGCTGTG GTTGCTCACA AGCTGGAGCT  
CACCAAGGCT GAGAAGCAGG TGCACAACCT CATGATTGAC ACTCAGCTCA CCAAGGGGT AAAAAACGAG GCTGCTAAGC  
TTCTCAGGGA GACGTGGCT CATCTACAAA CATACCAGAG CTGGTGAAAG AAG

SEQ ID NO:116: (Length of Sequence = 448 Nucleotides)

TTTGAAAATT TAGAGGATAT TTATTCTCA GGAAGGTGCA CAACAGCTGG CAGGCACTGC TTTCCTGCT CTAGGGGATT  
CCTCTCTCT TTTCCAAGAA ATCCCTCTC TTCTTAGAAG TGCCCATGG AGGCTGGGAT GTGAAAAGAA ACCATACACA  
ACACTCCAGA GCCTTAAAAA AATAAAGCAA CAACCTCTC CACACGAATA CACTTACAAA ATAAATAGAC GGATAAAGA  
GAGGCCACGT GCCTCCATC CCGGCTGTAG GGCTGCTTGG GGATAGTGGG GCTGGGTGGC TCGTCCAC TTCTCCAGC  
CAGGATGATC CAAAGGCTAA ATGGGATGGA AGGGCCCTGG CTTTCAGAGA GAGGGTGGG CAGGCCTCTC CTGGTACTCA  
GCAGGGAGGA CACTGGGGCA CGGGTAGGGG TCCAAGGGCC ACTTAATA

SEQ ID NO:117: (Length of Sequence = 551 Nucleotides)

GAGACGGAGG CTCGCTCTGT CCCCCAGGCT GGAGTGCAGT GCGAGATCT CAGTCACTG CAAGCTCCGC CTCCCGGTT  
CAGGCCATTC TCCTGCTCA GCCTCCGAG TAGCTGGGAG CCAGCGCGCC CAGCTAAAAA AACTTTTCAA GTCAATATTA  
CTACGATTTA ACATTAGAGT GTGACATGT GATTTAATC CTATAGCTAA AATACCTCAA ATATACGTTG TCATGTGCTT  
GAACATGATG CTAACCTGA CAGGATGAAG GAAAGTAATA TTCCTTCACT GTAGTTCAGG AGAGCATTTG TTTTCTTTTC

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TACCAATTAA CCCATCATIG CTTTAAACA ACCATCTGAA GGAGCAGAGA GGCAGGGTAG AAGACAGAAG GGGGTCTATG  
TGGGTACTAA AGATGTTTCT GTTTTGTAAAT ATTGTGTGTG TGTGGGTTTA TGGTTTGCTT AAGGGATCAA AACCTGGAAA  
AAATGGGATT CCAGGAATGG CTCTGTTATT TTTGCTGGGT TCCAGCTTGT AATGCCTACT GCCTTGGTTC A

SEQ ID NO:118: (Length of Sequence = 426 Nucleotides)

CCCCACCCA AAATCAAAC TGAAGGTAGT GTCAGTGTAT ATATGGNGTC CCTTGTGCTG AAAGTCAAAG CAGCTTCATT  
TTGGGGCCTC AAGAGCTCCA GCTCTGGGCT CTTACCTCT AAGCCCATGG GCAGTGCCCG CCCAGTGGTG TGTATAGATC  
GGAGGCTGAG GGCTCAGCC TTAGCTGAGC TGTCGCGTGC TGGGGAGCCT GTGCAGGAGG GTACAAGTAG GAAAGTGCCA  
TCTGCATGGG AAGAAAAATG CAGCGTCCTT GGTAGTGGG ATGGGGTCCA GGAGACCCAG GGAGCTTGCC CAGAGGGACC  
TGAGTGGCAT TCCTGTAGGA AAGCAGCCCA GATCTTGGG CCGTAACGGA TGTTCGTGAA GTTTTGACTT TGAACACCA  
GGTCCCATG TTAACAAGCT TCTTGA

SEQ ID NO:119: (Length of Sequence = 434 Nucleotides)

TTTTTCGGTT AAAAAGGCC AAACTTTAT TTAGTTTCA GGGAAATATA AGATGCATGT AAACATAAAA TACAAAACAA  
AACCCAAATC TTACAGTCTA GAAGCATGCC AAGACAGAGC ATTTCTGCA GACCAAAGAG TCCCGTCAA GTGATAAAGG  
ACACCTGGAA AGTGGCAGGC CAAGGGGCTG GTCCCTTCCC CAAGGGCACT GCATTTTGT GATGAGATTA AAAACAAACC  
AACTCCACTA TAAAAAATG TAGAAACATG GGATAGTTTA GCACCACCAT TGATTCTGGC AAATATTTCA GCACTCACAT  
CGACTGCACT GAGTTTAAATG TCCTTCTCC AGTTTCTCTG CTGAGTAGGG AAGGAGGGAA ACCTGGGCGG AAGGGGCTCC  
TCCTGACCCC ACAGGGCCAC TAGGAGCTTG GAGG

SEQ ID NO:120: (Length of Sequence = 276 Nucleotides)

AGGAAGTGT AGCAAATGCT ACCATGTGGA AACTCAACT TTATTGCTT TATTTATATA TTAAACAATT CTAAAGTATT  
TACTTCTGCT TTGACAAAA AATGAAAAAT ATAGGGGCAC TGACTGACTC CTCCTTAGGA GAAAGGGGT ATATGTACAG  
CTATGGAGAG TTACGGTTCC CCCTTTAACA AAGGCAAATA TTAATAAAAA AGGGCTTCAT CGGTCAAAAA AGGGCTAAGA  
GCTGCAAGCA TTTATTACA CTGTACATG GGGCCC

SEQ ID NO:121: (Length of Sequence = 554 Nucleotides)

ATTTCTTTC TTAATCATAT CTGATGCTGG GATGTGGTA ACCCAAACCT GAAGGCAGCT GCTAAATCTC AAATGCTAAA  
AAAATACTGC AATTTTGACA TCAGTGAGTC AGATCAATAC ATCCTCTGGG GCTGATTTG CTTACAGTT AGGATGAGCC  
ATCTCTAAG CTGCAGGCTC AAATGGGATT AACTGAAGTC TATACCTGGG ATGGGCCATG GACTGAGCTG TCCATGCAGA  
AGGACCAGGC TGTCATGCC TTCCCTGCCC TTTTACTCAC CACTGCACAG CAGCCCCAGT GGGCCTACTG CACATGTCTA  
GGAGAAATCA CTCTAAGAAA ACCAACAGGA ACAGGCTTTA GGCAACAAGA GACGTCTCAC TGCACTCTCT CCCACGTCAG  
AACTTGAGTA CTGGGTCTTT GCAGCTCAGA GCATTCTCC CTCCCTTTC CTGCCCGAAA GGCTGCTT TTCTGAGAC  
ATATGGCACT CCATGCTGCA AGTTTCAAGC AGATGCAGGT TCTTATGGGG CTTTTTGCTC AAAGGACTTT GGT

SEQ ID NO:122: (Length of Sequence = 238 Nucleotides)

CACCTAAGCA GGTAGACATC CGCAAAGTCA GATGCTTCC AACATGACAC CTGAACATCT TCCTTTATGC AACACCCAAA  
CATCTTGGCA TCCCCACCCC AGGAAGTGG GGGAGGAGGT TATGATCCCT GGGCGCTTCG GCAGAATGGA GAGCTGAGGT  
GTCCCTCCC TGCTAGTCAC CTACCAGGTG TCTGAGCAGC TGCATGCTCC CTGGCTCAAG TGGGCACTGT ACCTTTTG

SEQ ID NO:123: (Length of Sequence = 244 Nucleotides)



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ATCCAGGCTT TCATTTCCTAG CCAACCTCA AACACCACCA ACTACAAAGA AAATTAAAAA GTCTAATTG TAACCTTCAG  
ATAAGTATAA ATTAGTTTTT TCTAGGCTTT CATATTGCG CTCTTATAC AATCTATCTT GTAAAGTACA TTCTCTTAAA  
TTTACATTAT CTAAATTAAG GCTAAGCAT TATTAAATC ANTAAATCAT ACAATATTTT ATGGCAATAT GCACATATTT  
ATAA

SEQ ID NO:124: (Length of Sequence = 330 Nucleotides)

CTCAGCGTAT CATAGGCGTG CTCACCTCC TCCCCAGCT CCGCCCCGC AGGCAGGTGG TGTAGGATAG AGTGGTGCAT  
GAAAGGGGGG AAGCCCGAGG GGCCCGCTGG GAAGGGTGCT GCCCCGTAAA GGGCATCCCA CTGGCACTGT GCTCANTCTG  
CCGCTTCTCG CTTCAGCTCA GCCAGTCCG GCGCTGCTC TTCAATCACT TGTGTGTCCT TCTGCTGCAG AGCTAGTTGG  
CGCTTGGTC TOGATGTCCT GCACTGTGGC TGCCAGGTTG CAAGGAAGGC TGCCCCGTGC CATTCGCGG GTGAGTAGGA  
GCGCTCTTT

SEQ ID NO:125: (Length of Sequence = 281 Nucleotides)

CCCTCTCCC TTGGTCTCT CATTACCGA GCCACAGTAT TTCTAAAGC TGGTGGCAG CCTGCACCT GCTTATCTT  
GGGAGACAG AGTTTGCATC CTATTACAAC CCATAGTTT TGCTAACCA TGGTGGAGG AACCATCCTT CCCAATCCCA  
ACCTCAACCA AAGCTTAGAA AAAGTGCCAT CNTTAACCTT TCAGAATCAC TCATAAGTAA ATCCTATAGC AGTCTCTGCT  
AATGCAAAAT TCAATGTGTG CCGCTTATT AGGTGACTTT T

SEQ ID NO:126: (Length of Sequence = 266 Nucleotides)

CTTTAATGA TGTGTTCTG GTGGGATTA TAAAGGAGA TGGACCCCTG GNAAGATGCT TTCTMAACC ACAACCCACA  
CATGGGTCA CCAATTCCTC TTCTCTCC TTCTGTGGT GGCCGGAGAC CTGTAGGACC TTCCCTCCCT TTAGGGTTCT  
GTAAAGCCCC TINTCAGTCC TCAGAGTCCA TTCTCTCTT GTGCTGAGGG CCTGCAGTGG GGACCATATA CTTCTGGTGC  
TCTAGTTTG CTGTGCGTC TGTITT

SEQ ID NO:127: (Length of Sequence = 435 Nucleotides)

GTCTGTTCT ATTCATTTTG TAGTTGCGAG AAAAGGAATG AACCGTACT ATGGCAATC ACCGTGACGT GTGATAATTT  
AGTTTGTAT GAGTTTTCAC TCTTAGGTAA AACCTAGTTA TCTAATTA TAATTAGTTA TGGATGATAT AGTAATTTTT  
TTTTTTTTT ACTGCGTCTC ACTGTCTTC GGGCTGGAGT ACAGTGGCTG ATCAGATTC GGTGCAGCCT CGACCTCCCT  
GGGCTCAGT ATTCTCTGC CTCAGCTCC CAAGTGGCTG GGGATTATGG GCATGCACCA TCAATGTCTG GCTAATGTTT  
GGTGTGTTT TTATAAAGC CAAGGGTTT GCCATGTT CAAGACCCG GGGCTGGTCC TTGAACCTCT TTGGGGCTTC  
AGGCAAGTCC TCCACCTTC GGGCTTCCC AAAGT

SEQ ID NO:128: (Length of Sequence = 471 Nucleotides)

TTCCCTTCCC AAGGACTCGA CCTGAGAACC GGCATGTACT CGGAGATCCA GAGGAGCGG GCAGACATTG GGGGCTGAT  
GGCCCGGCCA GAATACAGAG AGTGGAAATC GGAGCTCATC AAGCCCAAGA AGCTGCTGAA CCGGTGAAG GCTCTCGGA  
GTACACAGGA GCTCCACCGG GAGCTGCTCA TGAACACAG AAGGGGCTT GGTGTGGACA GCAAGCCAGA GCTGCAGCT  
GTCTAGAGC ACCGCGGGG GAACAGCTC ATCAAGAAGA AGAAGGAGGA GCTGGAAGCC AAAGCGCTG CAGTGCCCTT  
TTGAGCAGGA GCTGCTGAGA CGGAGCAGA GGCTGAACCA GCTGGAAGAA CCACAGAGA AGGAAGAGGT TCAAGCCCC  
GAGTTAATTA AGTCAAGGGA AACCTTCCGA GATTCCACA CTGACCAGG AGAGAGAGAG CTTTAGGGCC A

SEQ ID NO:129: (Length of Sequence = 186 Nucleotides)

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GCCTTTAACA TCCTCTGCCA ATRACTGGCC TCAAATCACC AGTGGAACTT TTTCAAAAAA TACACCATTG GCTCTATGTA  
GTTCTACTGA TCTRAAATAT CCACGTGTGG GCCAGGAGCA CTGGCTCATG CCTGTAATCC CAGCATCTTG GGAGAGCGAG  
GAAGGAGGAT CATTTRAGCC CAGGAG

SEQ ID NO:130: (Length of Sequence = 307 Nucleotides)

ATAAAATACT TAGGAATATA CCTAACCAAG AAGGTGAAAA ACCTCTCCAA GGAAACTAT GAAACACTGC TGAAAGAAAT  
CATAGACTAC ACAAATACAT TTCATGCTCA AGGATGGGTA GAATCAATAT TGTGAAAATG GCCATACTGC CAAAAGGGAT  
CTWCAAATTC AACGGTATCC CCATYAAATA CCACCATQMT TCTTTACAGG NTTGGGAAAA GGAATTCTAA AATTCATATG  
GGACCCAAGA CGGGGGCCGC ATAGCCCATG GCCGGCTTAG GAWAAGGGA CAAATCTGGG AGGCCTT

SEQ ID NO:131: (Length of Sequence = 184 Nucleotides)

CCAGGTGGA TGGAGTGCAA TGGCAGATC TCGGCTCACT TCACTCC AGGTTCAAGC AATTATCCTG TCTCAGCCTC  
CTGAGTAGCC GGGATTACAG GCACGTGCCA CCACCCCAG CCAATTTTGT TATTTTGTAGT AGAGACGGGG TTTCACCGTG  
TTAGCCAGGA TGGTCTCAAT CTCC

SEQ ID NO:132: (Length of Sequence = 270 Nucleotides)

GCNGGAGGGC GTCGAGGGCC AGGAGCTATT CTACAGCCCC GAAATGGCTG ACCCCAAGTC AGAACTMTTC GMENAGACAG  
CCAGGAGCAT TGAGAGCACC CTGGAAGACC TCTTCGGGAA TTCAGACGTC AAGAAGGATT TCCGGAGTGT CCGCTTGGCG  
GACCTGGGGC CCGGCAATC CTTCGNNNC ATTGTGGATG TCCACTTTAA CCCACCACA GCCTTCAGGG CACCCGACGT  
GGCCCGGGCC CTGCTCGGT AGATCCAGGT

SEQ ID NO:133: (Length of Sequence = 529 Nucleotides)

CTTGCACTAC ATAGCATGT TATTACTGAT AGCTTTATTA ATCTGCCAAA TAACATAGAA TGTAGCCTCA AAAGGATGGT  
CGAGGGTTCG CAATCTTTCT TTCTCCACC AGTGGTGTGG AGCAACTCTG TGCCTTAAAG AGGGCACCAT GGAAAGAAAC  
AAAAAGGAAT CTCTTTCAAA ATGCTGGAAA TTAGGCTTAG CTCACTACTT TCAGGATAAA GACAAC TGCA TCTAATTAAG  
TCCACTCCAC ATTCTTTGG ACTCTAAGTA TTCTGCACCT GAAGGCTAAA TTGAAC TGCC TCAGCCCTAT CTTTTTGGC  
ACATCTTTAA TTACAAATCT ATTCTTTCT CTCTTCATTT ACTTCTCTTC TCTTAAGTAA GAAATGTGGG AAATGAGACT  
GGCAGTTTGG TTGTTTGCA TGTGGGTGTC CATTAGGCGT CTCATCTAT GGCCTTTT GGAATGTG CTTCTCTACT  
ACACACTGG GAGGTTTCC CAAGGCTCAA CCTTTTGCT TCAGGTAAA

SEQ ID NO:134: (Length of Sequence = 437 Nucleotides)

GACGGTGGCG ACGGTGCAC CGGGATGTG TCTGCCACC AGAGGAGGTG TCGTGGCGG GGAGCAGAGG GGCTTTGTTT  
CCCAGGTGAA GTTGGGCTT CTTCACCTCT AGAGGTGCGT GTGTGGGTGG GGTGCTTGC TGTGAGGTT TATGCTGTAA  
ACTGACAGCT GTCCCCAAG CATGCTGGC AGTGTGAGG TGTGTCGCG GCCACGCG AGGAATCCTC TGGGCTTCTG  
TGGTTCAAGT GGGGCCAGC GCAGAGCTCC ATGAGTTGCT GAGCAGCCAG CCTTCAGCA TCTCCTGGGT TTGCGCAGCA  
GGAGGCTCC CTTGTGCAA TTCAGGGGCG GTGGGGGCT GGGGGCACTC GTAGCAAGGT AAAGGAGCCC CTGCTCAGGC  
CCTTGTGTC TCCCTTTCT TGCAAGAGG GTAGAG

SEQ ID NO:135: (Length of Sequence = 534 Nucleotides)

GGCATGTGTC TGGTGGGTGT GTCAGCTCC CAGAAGACTG AATTTATGGT AGGATCACTC GCAAGGCCTT GTGAAGCAAT  
CTTACCTAAA ACAAAGAAA TATCAGGGAC TTTTGTGAC TATTTACAA TCAGTTTTAC ATTAAATTC AGGCAGTGT  
AATATGCCAA GTAGGGAAT GTGCCTTTT CAGAGTGGC CAGGAGCTC TGCTGGGAC ACGGAGAGGC AGGTGTGGCG

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TAAGGCTCA CTCGGGCTG TGAAGGTCTC TGATCACACA GAAGCAGCCC TGCCCGCCT GGGTCATTG CTGTCCGCTT  
 TTCTCTGTGA CCACAAGCAG CCCTGAACAA CCAGTAGTG TCTTCTTTCT CCAGATAGTG AAAAAGGGTG TCCAGATAAA  
 CCCACCTAAG TGAATGGGC CATCTCTAA ACTGGGGTAC CTCACTGCAC AGGTTCTAGG TAGGCTTTCC ACTTAATCTA  
 ACTTGAGGCC TACAGGTACC CTGTAAAGTT AGTGGGGCTT GTCCTGATT GTGG

SEQ ID NO:136: (Length of Sequence = 279 Nucleotides)

CAGTTTGGAC AAAGTAGCAT AGTGACTTIN TTCCTACANT GACTTTCGGA GAAGTINGCA GTTCTGGCA AAGTGACGCT  
 GGGCTGTTG AAAAAGGCAA GCTTAGCCTA GGCTGCCATC TTAAACATT TCGAGGCTGT AGCTTCTCTA GGATCCTTTG  
 CCTGTGTTCT GGTGGCCGGC AGTGGCCCGT CTAACAGCTT TTAACCTCTG ACTTAGTGCC TGAGCACCTA TGGCTGTGAG  
 AGATGCTAGA TACAGAACCC TGTCCTGTAC CACGTGGGG

SEQ ID NO:137: (Length of Sequence = 518 Nucleotides)

CAAAATATTA ATGAGATCT TCCTGTGTTG TCTGTATAT GTCTATCGT TTCTGGGTGG TTAGGAGAA TCTGTACTAT  
 TTCAGCATGT CCTCTCCAG CAGCAAAATG AAGAGGAGAA CTAAGTGTG CATTAAAG GTTGGATTG CACTTCTCTT  
 TCTCTAACAA TATGOGAGTG GCTCAACTT TTCCATACCA GCATGCATAA TGAATGGGTG CCAGTGGTC ACTATCTAAC  
 TGGTGTACTG AAAATCTTTC ACTGAGAAGA CGGCTTAGTA ATTCTGAATC TCCTTCACAG GCGCTTCGGT GGAGAGGAAA  
 ATCATCTACC CACTGTGTTT CTTGTCTTTC TGTGACACTG CTCATGCTTC TCTGCCAGTT TTCTCTGTTT AGGGTATTG  
 GATTTTGTAG TAGTCTGGAG CTCCTAGACC CAAGTATGGA TTTATACCC ACTTATCTAC CGATTGTGA TACTGAGGAT  
 CCTATCCAAC AAAGGGTGA AATCCAGGAT CGGCTTC

SEQ ID NO:138: (Length of Sequence = 266 Nucleotides)

GATTGCAGGC ATGANCCACT GCGCCAGTC GAGTGGTAAT ATGTMAAAG GAAACCTTTT TCTGAGCAGG TCTCAAAGA  
 GAGGTAAAA TACTGAGTAG ACCATMCTGT AAACAGATGT MCTGTATYC GGGCTTCAT ATTCCATTGA TAAAGCACAG  
 GCAGAGCTCA GAGTAGATTT AAYGTAATC TGAAGGGCAC TAGGATTTTC AGAATGGTAA ATAAGCATTG GCTTCACCTT  
 AAATYCAAT CTGCATTGGG CTGTGA

SEQ ID NO:139: (Length of Sequence = 341 Nucleotides)

ACCTCGCTCA CGCTCTGAC CACGACAGG CAGAGCAAAG GATGCGGAG TTGCTCTGC TGCCATCTA AGGGGACGTA  
 GGCAGAGAAG CAAAGGCTC TGCTCTOCT CCATCCATCC CGGTGTGCTG GCGCCAAAG AACAGGAGTC CTTCAACTAT  
 TGCTGCCAG AGACCCAAT TTAGGGACTG TAGTCTGCAT CTGGATGAGC TGGGCTGTAG ATTGAAGTCT CAGAAGCAGG  
 GAAGGTGGA AGGGGTAGG TCCAGAGCC CATGGAGTTA TTGCTGAGAA GATATGCAGG GGACACATT CCCAGGGGCA  
 GAGTAGAAGC CTTGGGCTT G

SEQ ID NO:140: (Length of Sequence = 234 Nucleotides)

GTGAAGGGAG TTGCAGAATC AARTTGCTAC ATAGGCCAAA CAAAAAGAA GGCTTTTCA AAAACATTA AATTCACATG  
 CAGTCTCAGA GACTATTTAG GCAAAGTCA AGTTAGGAGC TTTTAGGATG TGGGANTAAA ACTTAAATG GAGGGGAGGG  
 CTTGCTCTG GAGAAGGAAG AAGCCAGACT TGTTAGACAG TACTCTTAAC TCCTAGCCCA GCTAGOGTG CCT

SEQ ID NO:141: (Length of Sequence = 354 Nucleotides)

CTACTAGGT TAGCAACTGC AGGAAACTT TCTTCATTT CACTGAATTT TAAAGAGAGA ATCTGTCTC TATTTCTCAG  
 AGAAACTTAG GTGAAAGTA AAAGAGAGGC AAAATCTTT TCCTTCATGA GATACCTTGA TTTTATCTC TTTCTCTACT  
 CATGTGCTTA ACTGGTGAAA TGATTCTGTA GAAATAGATC CTTCTGATTC TGCATCTCAT TTCCTATGG CAACTACAC

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AGGAGGAATC CAGCTGGAAA TGCCACTAAC CCCACATCCA GCACCTGAGA GAGGAAGCCA GTCGGAGCGC CGTGCTGGGC  
TCACTCACTC TGGGCTGCG CACTGGGGTT GTGG

SEQ ID NO:142: (Length of Sequence = 373 Nucleotides)

GTTTTTGCAA CACTTTTTTT TTAAGTTATT GGGTGCAAAA TCCCAAACCA GGATATGTGT ATGTCGTGTG GTTTATGTTT  
TINATTTGAC CTTCCCTCTT TTCAACCTAC CCCCTTTTAT ATCTAATGTA GAAAAAGCGA AATTGAATCT GGAAAGCAAA  
CTGTTGTATA TAGTTGOGGT AACAAATCATG AAGAGAGAGC CGGGCTGTCC AGTTGTTTTT GAGACAGAGT CTCACTCTGT  
TGCCAGGCT GGAGTGCACT AGCATGATCT TGGCTCACTG CAACCTCCCC CTCCTGGGT TTAGGCGATT CTCCTGCCTC  
AGCCCTCCCA AAGTAGCTGG GATTACAGAC CGTACCACC ACAACTGGGC TAA

SEQ ID NO:143: (Length of Sequence = 262 Nucleotides)

CCGCACTCG GCCAGAGGCG GCTGCAGCAG CTGCTMCCTT TTCCCTGCCG CGCCTCTCC AGTCCCTTTT TTAATTACCA  
CTCCAMCTGC TGGGAACGGG CGAGAAAGAG GAGGAGGCGA GAAACTCCCA CCGACCCACA GAGGGAGCAT GATTTCGGCA  
ACTTCACCTA TCATTCTGAA ATGGGACCCC AAAATTTTGG AAATCCGAC GCTAACAGTG GAAAGGCTGT TGGAGCCACT  
TGTTACACAG GTGACTACAC TT

SEQ ID NO:144: (Length of Sequence = 384 Nucleotides)

GGAAAGCGG GACCCAAACA GTGGTGCTGG GGAAATTTTT CCCTGTCCCC TTGGAAGGC TGAGTGGGTG ATGCAGCACA  
GGAACAAGGC TTGGAAGTCA GAGGTCTCAT CTTCACTGTA ACAAGCATA AAGGACTTGG GGTGTAGCGT GTGINTGGGC  
TCAAGTGACC ATGCAAGTCC TGTCACCTCC TTCCTAAGAC CCCATCCTTC TCCCAAGTCC TCCACAAGAG CTACCTCTCT  
CAAAACAATA ACAGAAACAC ATCAAGCTTG GGGCTCACTG AATTCAAGTT CTGATTCTC CCGTCACCCC AGCAACAGTG  
CCAGTTTGA TTGTGACACT TTGACCCAGC ACTTGGTTTT GAATGTCTT TTGGCTGTG ACG

SEQ ID NO:145: (Length of Sequence = 324 Nucleotides)

CTACATGGAA TCATAAGTGT TCTAATAAAA GGAAGACAGA TTTGAAGACA GAGGAGGAAG GTGATGTGAT GATGGAAACA  
AGGGGAGAAA ACGCAATGTG ATGTGGCCAC GAACCAAGTA ATGAGGACAG CCTACAGAAG CTGGTCAAGG CAAGGAAACA  
GATTCTCTC TAAAGTCCCT GGAGAGGGCC TGGCCATGCT GACACCTTGA TTTTCTCCCA GCAGAACTC ATTTTGGATT  
TCTGGCTCC CAGAAAAGTA AGGGGTAAT GTGCTGTTTT ATGTCAGGTT TGGGTAATT TGTTTATGTC AGCCATCGG  
AAGG

SEQ ID NO:146: (Length of Sequence = 355 Nucleotides)

TTTGCTCTT TCTTCTTA TCCAAGCAAG GGTGTGTTGA CAATGACCTG ATCGGGGTTT AAGCGGGCT CTGCTGCTC  
ACCAGACCTG GGGTGCTGAG CTCGACCAG CCTGGGCAGC CCAACCCACA GGAAGTGGG TTTCATAGCT GGGTCTTCAG  
GAAGGGTGG AGGCTTTGGG AGTGGCAGCT CCGGCTCC CACCACCCA AGCCAGAGAA TGGGGCAAC TTGTATGCAT  
GGCTTATCT TAAATTACTA ATCTGCTTCG GACCAGACTC ATCTCTACAG TATAGAGTGA GAGTTATGTC TTCTATGACA  
GGTGTCCAG AAGCCCTGGG TGGCTTTAAA GTCTG

SEQ ID NO:147: (Length of Sequence = 337 Nucleotides)

CAGTTTCTG AGTTCCCGTG TGCTAGACTG GCCAGAAGAG AGGGTCTGGG GCTGGTCC TGGCCACTC TCTCTGTTT  
CTGGCTCTT CCGCTTCAC TCCGTCAG TCTGGTTTG AGAGCAGGG CTGTTCTACA GCACCTCAGG GAAGGGAGGA  
GAGATACCTG CTGCTTCAT TGCTTTCCC TTCCTGGAGT CGATGCTTT CTAAGGGTGT GAGCTGCTCC TTGCAGGGC

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GGGTCAGTTT CCCAGGCCAT GCGGGGGTG GGCATCTATG CTAGGGCTGG AAGCTGAGGC TGGCCGCCAA CTGTGGGGCT  
GGGGTGGGG TGGGTGG

SEQ ID NO:148: (Length of Sequence = 278 Nucleotides)

GGAATCAGAT GCTCAGGTGT CCAAGCAGGG ATAAGGACAG GCAAAATAAA TAACCCGCC AACCCTATC GTCCTCTGC  
TGCAACACGA CACAAAGGTT TAAAGATCTG GGCCCAAGA CTCTGGGACC CTTCAAGCAA GTCAGGTGGA AGAAGGTTTC  
CCCCCCCCC ACCAGGCCTG TTTGTCCAG GTTGCCCTAG GATGGAGGCA GTTCAGACC TGGGTCACTG ATGCTTGATA  
GGAAGATCTT TGATATCAAT GGCCTAAGCT CTGCTCAT

SEQ ID NO:149: (Length of Sequence = 368 Nucleotides)

TTTTTTTTT GTTTCAACA AACTTTACTA AATAACCTG GAAAGGCAAT GAACGATCTG ACAATTTAAG CTCTAATGAT  
TTAAAGCTCA GCTAGAAGAA AGTGAGGCAT GACATATACT GTCAACGGAG GGTGAAGGAG GCAGATTTCT GGAAATGCAA  
TGATCCCA CAATTGCTTC AAGGAGAAAC CTGCAGACAT ATTTTCAGGT CTGCTAAGT AACAACTGTT TATTGTAAAT  
CAATACATTT GGGGAAAGTC TGCTATGTAG CTAAGGTCAC TGTGACCACA GACCAACAGA TGGAAAGGAA AAAGGCACTG  
GACCAGCAAG GAAAAATACA TCCCCTCCT CAAAAGAATT TTAAGGTG

SEQ ID NO:150: (Length of Sequence = 367 Nucleotides)

TTGTGAAATG GGCCTGGGTA GATAAGGAAA AGAACCTCCA AGAGGTTAAG TGATTTGCGG ATTGCTTAA ATTATACAGA  
AGAGTCAGCA CCAGTGCCCA GGCCTTCTGA TTCTTAGTGC AGTAAACACT AAGCACCATC ATTCCATTTC ACCACACTCC  
TGCTTGCTG TTGTCTCAG CTAAGAAAGC CTACCCCTGA GTTACCTCT TCCATCTTAG AGCCTTCCTG CTGCTGTCT  
GCCCCCTGC GATGGGGACT TCTTTGGCCC TTCTCACCCA GCCCAGCTC TGCCCGTTT CCTCTCCTT TCCACTGCG  
CTGAGCTCTT TTCTCCTTC GAGAAGCCTT TCCTCATCT TTCTGG

SEQ ID NO:151: (Length of Sequence = 366 Nucleotides)

CCCAGGGGC CGCTCCCTC CTCTCTCTC CATAGGTGGG GGTGTGGGC CTTCTTTTT TTTTGTCTT GGAGGGCAGT  
TAAACTTCTC CATTTGCCTC TCTCTTCACA CCCAAATGCC AAAGGACACT TTCTTTCT TTTGTGGGTA GTTGCAAAA  
AAAAAATTC CTATGGGTTA CTGCCACTTT TAAATACTTT GTAACTTAAA GGCAAAGTAG TATGTCACCTG TTTCTTTTCC  
CTGTAGTTTA CTTTIGAGGT TAAACATCTT TCCATGTCTT TATTGGTCAA ATACAGTTCC TCTTTTGTG CAATGTTAAT  
CCTAATATGG ACCATTTTTT CTAATGGGAT TACCGATTTT TTAAA

SEQ ID NO:152: (Length of Sequence = 269 Nucleotides)

GTATTCTGG CAAGTGCTTT CAGGGCCCTC CAGGTTTGG CTGGTCACCA TGGAGGGGG GTTCAGGTGC TGAATTTAGG  
GACCCAGCA TCTCACAGGT TTCCCTTCC ATCTTTCCA GTGGCACTGT GTCTGAGCAG GTGTGCCAG GTGAGGTGT  
ATCCACTG TGCTGAGCAGG TGTGCCAGG TGAGGTGTA TCCACTGTGT GTGAGCAGGT GTGGCTGTG CAGGTGGAAG  
TGGGATATN TGGGCACCTG GGTGCCATT

SEQ ID NO:153: (Length of Sequence = 260 Nucleotides)

TTTCAGGATT TTATTTAAAA TTTATGTAA TGGGGTCCG GCAAAAGGAA GGGGTGGAGG GTGGGGTACA TGCAGGGGAC  
ACAGGAACAN GATCCACATG GCCAGGNC CAACTTCTC TGTGTGGGG AAGAGGGATG AAAAGACAAG ACCAGGGCTA  
NGAGCTGGGG TGGAGAGGG GAGGGNAAC ACTGGCTGCA TTCCCNAAAC CCCANGANG ACCTATAGGC CCTGGACCCA  
TGGGTACCC TGGGCCCTAG

136

SEQ ID NO:154: (Length of Sequence = 405 Nucleotides)

TGGAATTGT GAGTGGGGAC CCATGATGTA TGGGTCTCAC CTGACTTGAG GTGAATTTTG GAGTGAAGGG CCCTGAGGTC  
 AGCTCCCAGG TCGGTCGTGC TGGGCCAGGC CTGGTTTTC AAGGGGCTGA AGGATCCCAG TCCACCTGTG TGCATGTCAG  
 GGCTCGGCCG GGAAGAAGCC AGCAAAGTCC CCCGTGTCCC TTGCTGAGTA TTCTGTGACA GACAAGCCTC CATTAAAGCC  
 ACAGCAGTGC TACCCACCAC ACACACCTTG CTGGCCCGGC CACCACTGCT GGCTTCAGCC CCTTACAGAG CCCATGGNTT  
 AGCAGACCTT CAGATGTAGG TCAGTGGCCT TANCCTGINTC TATCCATGCT GTTAACTCC CTGCCTCCAA CTGGGGGTCA  
 CCACT

SEQ ID NO:155: (Length of Sequence = 40 Nucleotides)

CCATGATCTT ATTTAATTACA TCTAGTTTTT CTTTATACCT CTAAAAAAA GTGCCTTTTA GATTTACAGC TTGTGCTTCT  
 AAAGCAAAGG TTAAACATC ATGCCCCAAA GGAAACACAG GTAAAAAGGA AGCTGCCATA TAAGCTCTTA AAANTGTAT  
 GTTACAAGGT TCTAAATCT CTTACAGCACT GGTGGTTGG TAGATTGTAC GACACTGACA TGGTGCTTGG GAGGGTCATT  
 TATCTGATGG TTGGAGCAGC ACCATGGGAA AGCTGCCAG ATGGTCTACT GAAGTCTTG GCTGTGACA GAATGGGCC  
 AAGGGCCAGN AATTCATGAG TCCGGGGAAC TTTGGNGTC CTTACTCAAT CTCCTTAGTG CTAAAGNTC AGAGTCTCAA

SEQ ID NO:156: (Length of Sequence = 443 Nucleotides)

GTCCCTGGA TTGCTTGTG GTTGGGAAC TTTAAGAATG GCAAACTGTG ATTGGNTCCG ATTAAGACAA GCTTTGTAGT  
 TTTCTGTG TAACACCAA ATCCCGCTG GGCCATGAGG TAGCAGAAGT GGGCCGATC CAAGAGGCC CTGAAGCCA  
 GAGTGTGCC CATGGTAGCC ATCTCCTGG ACTCGACGTC CATGTGTG TTCAAGTTGG ACAAGACCAT GGCAGGTGC  
 GGCTCCAA CTCCCCATT CTGCTCCA CAGCAGTGG ACGGGCAGG CATCCGTCC GACATGAGCT GGTAGACTGT  
 CTTACAGGG TCGTTGATT GGGAGGCTT TTAGCAAACC TGGGTATGA CTCGGCGTG TGTCCGCTG TTCCATCTTA  
 CTTGCAAGTA GCAGAGCGT ACCCCACAAG GCCATTCTTA ATT

SEQ ID NO:157: (Length of Sequence = 383 Nucleotides)

ATTGGAAGG GTTTAAACG GAGTCGAAC CTGAGTAGAT TTCCAAATTT TACAGCCAGG ACTACAGAAG TGCATCATTC  
 TAGAATGTGT AGACCTGAGT AGCTTATACA CTACAGAGCA CTTTGCTTAT TTGAAAGTAA TTCAGCAACA GGTCACTTTG  
 GGATATAACC TGAACCTTTT TTGGAGTGG GTGGGTAGA CTACAGTAGA CACAGGGCT GGACATGCAG ATGCTTAGGG  
 GATTAGCGTT TTTCAATTT TGTCTGTT GTCACTTCAT TCTGTGTGT TCTTACCTCT ACAAAGGTAC ATTACACATT  
 TTARGETTTT TAGTGACCTT TAACCATGTT ACTTGAAGCA TTTTGAATA TAAAGCTATT TTA

SEQ ID NO:158: (Length of Sequence = 241 Nucleotides)

TGGTSTGTG CTCAGCTGCA GCGGCASGA AGTGGTSTC CAGGGGAGTG GACAAGCAAT TCTCTGTCA TTTGCAACTT  
 TCTTCAGGAA CTCAGATAAA GAACACTTGG ATAACGATGA TCCCTGTAGA GGGATTTCAT CTGTACCATC ACACATGGAA  
 GAGGAGTTT TAGGTCAGGA AAGGCAGCTN CTAAGCTAAA GGTTCTTGG TCCCTINGTC CTGGCATGCC TTAAGGAGGG  
 G

SEQ ID NO:159: (Length of Sequence = 224 Nucleotides)

CTGTCACTAA TGGCTCACTA AAGGGCCAGC AGTTTAAATT ACACAGGTTG CACTAAAAGC TGCAGCTTTG GCCAGGCAAG  
 GTGGATCACG CCTATAATCC CAACACTTTG GGAGGCCGAG GCGGCAAAT CACCTGAGGT CAGGAGTCA AGACCAGCCT  
 GGCCAATATG GTGAAACCTA AGCTCTACT AAAATTACAG AAATTAGCCG GTCGTGGTGG CACA

SEQ ID NO:160: (Length of Sequence = 377 Nucleotides)

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GGAGGCTGAG GCGGGCGGAT CACGAGGTTA GGAGATGGAG ACCATCCTGG CTAACACAGT GAAACCCCTGT CTGTACTAAA  
 GATACAGAAA ACTGGCCGGG CGTGGTGGTG GGTGCCTGTA GTCCAGCTA CTTGGGAAC TGGGAGGCTG AGGCAGGAGA  
 ATGACCTGAA CCGGGGAGGC GGAGCTTGCA GTGAGCAGAG ATTGCGCCAT TGCACTCCAG CCTGGGCGAC AGAGTAAGAC  
 TGTCCTCCAAA AAAAAAAAAA ATAATAATCA AAGCTCTTGG ATTTATAGTT TGGTCCCCAG CCTGTGTTTG ATCTTTCCTT  
 TATCCTGTTT TATTGCCATT TACCACGTCC TTTTGGAAC ATCCCTTTCA ACTGCTG

SEQ ID NO:161: (Length of Sequence = 273 Nucleotides)

GCAGCGGCGC CGGGCGAGGA GGCGGCAGGG GCGAGGAGGG GGCGGCGGGT GGCGACCGC AGGAGGCCAA GCGCCAGGAG  
 GCGCTGTG CGCCAGAGAA GCGCGCCGCC AGCGACGAGA CCAAGGCGC CGAGGAGCCC AGCAAGGTGG AGGAGAAAAA  
 GCGCAGGAG GCGGTGGCCA GCTCGCGCT GCTAGCCCC CTTCGCGCG GCGCGCGCG CCGCGGAGC AAGGAGGCAG  
 CCGCGCGGA GGAGCCGCG GCGCGCGAG ACT

SEQ ID NO:162: (Length of Sequence = 286 Nucleotides)

TTTGTGTC AAATAATCAGA GTACTACAAT CATCAACAT CTGATTCATT TAACATGTA GCATCTATAC CTGCCATTT  
 GTGTGAATAT TCAGTATATA TCTCATACCT ATTCTCATGC CTTCAITTTAT TGTGGTTATG GCTGTAGATA TGGAAAAAC  
 AGTAGCTGAG ACATTTTTAT TATGAATAT ATTATACCTT AATCAATCAG TCAGAAAATG CTTAGGAAGA AGAAATGCAT  
 GATTGTAAAT GCATGATTC AACATGCTAC CCGCCAACA AAGTTG

SEQ ID NO:163: (Length of Sequence = 342 Nucleotides)

TGCCCCAGGA AGACAGAACA TGGAGAACCG TCAAGGCAGG AACCCACAG ACTGTCCCTT CCAGCCCACA CTCTGCCACC  
 TCCTGGCCCT GTCCCAATTC TGAGCCAAGG CCTCCCGAG GCAGAAGTTG CCTGGTCTC TGTCCCCACA GTGACCTGAC  
 TGGGGGTGAG GGAGAAGGAG GAGAGAGCCC ATGTGTGGTG TGTGTGCCCC TGAGAACTTC GTGGTGACTG CCTTTGGGAG  
 CCGCAAGTG GCCAGAGGCA GGGGTAGCTG AGTTCTCTGG AGACCCCTTT TTTTCCCCA RGTTCGCCAG AGGGCAACGC  
 CATCAGTAGC AGTGTGGTGT TT

SEQ ID NO:164: (Length of Sequence = 392 Nucleotides)

ATTACCCGGG CCGCGCTCC CTAAAACAGA TCTACGGACC TTAACCGAG CCATGCTGAG GCTCATTTCA TCCTGCRGA  
 CGTATGCAGA GCGCTCACT GCTGCCATGG TGGAGTTCTA CACCATGTTA GGAGGAATTC ACCCAGGATA CACAACCTCA  
 CTATATCTAT TCACCCCGTG AAATGACTAG GTGGGTGAGA GGCACTTTG AAGCGCTGAG ACCTCTGGAG ACCCTGCCCTG  
 TTGAAGGCTT CCTCGGATT TGGGCACATG AAGCTCTGCG TCTCTTCCA GATAGACTCG TAGGGGATGA GGAGAGGCGT  
 TGGGACTGAA TGAGAAGATC GACAGGTTG CTCITGAAG CACTTTCCTT AACCTTCGGC AGAGAGGAGG GC

SEQ ID NO:165: (Length of Sequence = 406 Nucleotides)

GTTATAATTA TCTGTTTTA TTATTTATG TTTATCTCTT ACTGTGTATA ATGTAGAAAT TAACTTTAC CATAGGTATA  
 TACATATTGG AAAAAGCATC TTATATACAG GGTGTGTTAC TATCTGTGGT TTCAGGCATC CACTGGGGT CTTGGAACAT  
 ATCCCTTGCA GATAAGAGGG AACTGCTGTA TCCATAGAAT AAAACACCC CATCTTGAAG ATAGGAGGTT CTGTAAATG  
 GGATGGGGTC AGGGAATCTG AATTTTAAAA GTTTCCTATG TGATTGTATG CCCAGCCAAG GGCTGGGGAC CACTGTCTTG  
 AAATATAATG CTGAGGAAGA TACTGTCTTT GGATTTCTT GTTAATTCG AGTGCAAAT CTCAGGCTGG AACCTTATGG  
 GCCTTG

SEQ ID NO:166: (Length of Sequence = 453 Nucleotides)

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GAAACTTTTG CCATGGGTCA GTTTTATTGG AAGTTCATTT TCCTGAATGT TTGGAAGAAA GTCTAGTGAC TCAGGATAGC  
 ATTTCTAATT TCACAGAGTT ATTTTTCOCT TATGAAACAC AGATTGOCCT TGAGGTCTCC TGTTCCTACT ACTGCCCCCTC  
 ACTTTTATGT GGGCCTCCCT TTTCCTTTGT TTCTGGAGAA CCTTTTCTCTG TTCAATTCTG TTTTAATTTT CAGCAGTTTT  
 TTTCTGTGT GAGTGAGGCT GTTTCCTAGC AGGGAGGTCT GGTGGTCAT TTCAAGTTC ATCAGGGCTT CATCAGGGCT  
 TGCCACTTC AACCCCTACG CTATAGGNCC CTNTGCACCA TCTGCANTCT TCAAAATGTG CCCACTGGTT CGTCCCATG  
 GANGGCTGT TGGTAATTTG GGCTTTTAGG GGGGGCCATG GAAGGAGCAA ATC

SEQ ID NO:167: (Length of Sequence = 285 Nucleotides)

TTTACTCTTA AACTGTGTAC AACAGAATCA TGGACTGACA CAGGTAATGG CTGAGCCATA AGCAAATCGA GAAGTACAGA  
 AATGTCCAC CCCAAACAGC TGCGGAGTAC ACATCACACA GGGCCTCTGG TCCCGGCCCT CTCAGGTGCT CTGGAGTGGG  
 GGATCCTTTG AGGGAACCTT GACCACTCCT GTTGTCTACC TAGAGAGCAC GCCACTTGGG CCACCTACCC CCAACCTTTG  
 GCCAAGGAG TGAAAGGACC TGGAACCTGT CGTCAACCTC AGCAT

SEQ ID NO:168: (Length of Sequence = 327 Nucleotides)

CTAGAGGSCA CTCGTATAC CCGTCAGCTC CTGGAGCCAT TCATTCTATG CTGGGCAGAC AGGCTGTGAG AGGACATGGG  
 GGACGGTGGG AAGGNTCCAA AGACGAAGCT GINGTTTATC CTGTGTGGTT TTACACAGGG AATGATGAAA CATTGAAGGG  
 GTTTAATAAG CTTTTCCTAA AACATTTTCC CCTTAAACAG GCTGGCACTA TGTOGAAGCT GCCCAAATTT GAGATTGATT  
 TACCAGCTGC GNTAAGTCA ACTAAACCA NGCCTTTCCG AAAGAGACAT CGCAANTGGC TTACCCAANG TANTGTCCCG  
 TTTTCAG

SEQ ID NO:169: (Length of Sequence = 346 Nucleotides)

GGTGCTATGG AGAGCCGGCC GTCTCCAGG GGTGAGCTGG GGAGGCTTCT GCGGTCTGAG AGTCCCGGCG ATGGCGCCAG  
 TTCCCAGCA AACCCCTCC AGAGCTGCCC CCGGATGCAC AGACAAGGAG GGGGCTTGGG AGTGACTTGA GGCTGTGAGC  
 GGTGCGCCCT CGGTGTGGGC AAGTGAGTCC TCTGTGGCCA AGAGGTGAGA GTCTGCCCTG AGGCTGAGTC GAACACAGAC  
 CCGTGGCCCT CATAAATTA AACATAAAG CACAAAATG GCGCAACCA GACAGCATTG GCTTTCAGAC AGGCAGGGAC  
 ACGGGGGCCC CTTGTGTGTT ACCTGT

SEQ ID NO:170: (Length of Sequence = 398 Nucleotides)

TTGACCTCAA CTTACTGAGC AATGCCGTAG CTATGGAATA GAAGCATTTG TTGCACTCTT TTTGTGAGCC AGGCCCTGTA  
 GGAGGGATTG TGGATGGCAA AACCTCAGGT TCTGCCCAA TCTCCCTT GGGGCTGGA GGGTCTCTAG TTAATTGGCA  
 TTCCGGTGCT TAAGGCCACT TTTGGGTAGA GGTGTGGCAA GGATGGAGTG TCCAGACCTA TGATCTCTA AGAACTTTAC  
 CTTTAAAAA CAGCCACCCA AATGGTGGTG GCGTGGGAG CAGGTGGTGG TGAAGGGACT GGGGGTGTCT GGCCATKGC  
 ACGTACCAGA GGAGACTCTG TGAGCCCTCT CCTGCCTGA GGGACACTTA ACTTTTATAG CACTACATAG GGTCAACG

SEQ ID NO:171: (Length of Sequence = 321 Nucleotides)

AGACAGCATC TGGCTCTGTC ACCCAGGCTG GAGTGCAGTG GCGCAATCTC GTTCACTGC AACCTCTGCC TTCCAGGTTT  
 AAGTGATTCT CCTGCCTCAG CCTCCCAAT AGCTGGGATT ACAGGCATGT GCCACCATAC CCAGCTAATT TTTGTATTTT  
 CAGCAGAGAC GGGGTTTCAC CATGTTGGCC AGACTGGTCT CGAACTTCTG ACCTCAAATG ATCTGCCCAT CTAGGCCTCC  
 AAAAGTGCTG GGATTATAGG TGTGAGCCAC TGCGCCTGGC CCTTGGGTAA AACTTCAA TGCAMCCAAC CATTAAAGGT

A

SEQ ID NO:172: (Length of Sequence = 293 Nucleotides)



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GAAACTTATA GTCTTGCCCTC CCAACCTTCT GAACACTCCA GTAGAAAAT CTCTCGCCT ACCTTTATCA CCCCACGACC  
TACTAGCATT TCTTACTCTC AAAAAAATC TTTTCTGAAA AATCAAGACA GAGTGCAAAC AATCAGCATA ATTTTATTAT  
GACARAACIT TTAATTTTA TCCCTCTC TGAGAGKTCT GCTAGGACTC CTTAGATAA GTGAAAAGA AAKTTTTTAA  
AATTTATTCT CAAATCGAA TTCCAATCTG TATAAAAAGG GCGATTCTCC CTC

SEQ ID NO:173: (Length of Sequence = 282 Nucleotides)

GCTTGGTCCC GTTCTCAGG AAAAGGATGG ACCTTCTCTT CTTCTCAGAT GGTCCCTTCC ATTCCCTGA AACCTGCATG  
AGAGCTCCTA ACATGTTTCT CCAATGCAAT CAAGCCTAGA CTCCAAATGT CTTCCAGCT CACCTCCATC TATGCATCTC  
ATCTCTGGAT TTGGTGATCA GACTCTATAT TGACAGTAGG ATCTCAAACC CTGCATCCAT CCTTCTCCA GCAAGCCCTG  
CTAGCCACAT GAGGAACAAG TTTCCTGTGTTT TCCATGACTT CC

SEQ ID NO:174: (Length of Sequence = 353 Nucleotides)

CAAGAGGTGG GAGAGGTAGG GGGCACTAC AGTCCCCAC CAGCCCCACC AGGGGGAATG GACCCCTCCC TGCTCTCTGC  
CCAAGTGGCT CCCCCTGTAT TATGGGGGGG ACTTTGTGCA AACTCTGCC CAGAGGGGTG GGGAGGGTGG AGGGTGAGTG  
TGAAATGGCA GCGGTTGGGG CTGGCAGCTG TGCTACTGGG CACTGGGGGG CTGTAGGGC TCCAGGAGGA GGGCCGAGAA  
GGTGTGACC TTGTCTGCC CCGCACCTC ATGGGGTAAC AGCGGCAMTT TCAAGATGTG GAAGTTCTTC ATACAGGTCC  
TCCAATCTGG TCCAGATACT TGGCTGGGT TCT

SEQ ID NO:175: (Length of Sequence = 394 Nucleotides)

GCCCCATCCC TTGTGTACAT AATCTCTAAT ATTATATAT ATTGATATAG AATTCTCTCT ATAATATATG TCATAGAATC  
TCTCTTGGGC CTGGCGTGGG AATGTGACAT TAAGAAAACA TGCTAAGACT GGCCAGAAAA ATGGATATTT CCCAGACCTG  
GAGGATGGTG TTGTGGGATGT ATAGGTGAGG TCGTGGAGAA GATAATAAAC TCATTCCCCA AGATACCCCTC TTCAACACAA  
GGACAAGAAG GAAGGTGTGT GTGGGGGAG GGGACAATGG AGGGGGAGGA GTGGAAGATT TGGATTTCAT TTTAATAAAG  
TCAATTGAAA AATGAAAGTG CACCCCCCT CCAAAAACA GGAGATTCTT TTAGCAAGAG CCGTTTCATT CACA

SEQ ID NO:177: (Length of Sequence = 381 Nucleotides)

ATTGGGACGG GCCCCCTCT GAGGCGACGG ATGATAAGC TTGATATCGA ATTCTTGAT NTTTTCTAGT GFTATGGTTT  
TCTCCACTC CAATAACTWT TCATACCTKT GGTCTKAGTT TTTCCATCTA TAAATCATG TGCTAAATAA TTAATATCA  
TCTCTATCAT TGTGAGACTA CACAAAGCTT CCAGCCTGGG CAACAGGAAC CCTGTCTCTA AAAAAAATAC AAACATTAGC  
CAGGTGTGGT GGTATGCGCC TGTATTCCCA GCTACTTGGG AGGCTGAGGT GGTAGGACTA CTTGGGCTTT AGAGGTCAAG  
GCTGCAAGTG AGCTGTGATT GCGCCACTGC ACTCCAGCT GGGCAACAGG GCAAGACCT G

SEQ ID NO:178: (Length of Sequence = 443 Nucleotides)

GATTTTATTC AAACACAGGC AAGAACAATG ACCTTCAGAG CTGGGTAAAA ATAATAAGTT AAAAGCATGG TTAGAATTTT  
AGACAATCAG ATAAAAAGTT TGAAGGAAGT GATTTCCTT TCTCTCTTA ATTGATTAAT TCAACACAGC ATAAAAATAA  
TTTGTATCTA TAAATATCC TTGTCCAC ACAAATGAAC TGGAGGTGGC CTTAGGATTT CTTGACTAT GCACAATGCA  
CACAATCTAC ATGTCCCTCC TCCCAACTT TTAAGSCAA AATGGTCTG CATCTCAGG CAGAGGGTGG GCTCATGCCA  
GCAGTCAGCT GTGGTCAAGG AACTGGGGG TGCGTTTCT CCACGAAAG ATGCTGCTT TGGGTCCACT TTGGGCGCGG  
GATCCCATTT TATTTTCTAG CTTGTGCTC ACCACAGGA AAA

SEQ ID NO:179: (Length of Sequence = 325 Nucleotides)

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TGGGGGACCA GCATTGCTCC CAGCTGAGGG GCGCGTCTTC CTCACCACT ACCGGGTCAT CTTACGGGG ATGCCACGG  
 ACCCCCTGGT TGGGGAGCAG GTGGTGGTCC GCTCCTTCCC GGTGGCTGCG CTGACCAAGG AGAAGCGCAT CAMCKTCCAG  
 ACCCCCTGTG ACCAGCTCTT GCAGGACGGG CTCCAGCTGC GCTCCTGCAC ATTCCAGCTG CTGAAAATGG CCTTTGACGA  
 GGAGGTGGGG TCTTACAGCG CCGAGCTCTT TCCGTAAGCA GCTGCATAAG CTGCGGNTAC CCGCCGGACA ATCATGGCCA  
 ACTTT

SEQ ID NO:180: (Length of Sequence = 213 Nucleotides)

GAGCATGCC CCGAGTCCC CAAGATCTG GTGGGGAACC GCGTGCACCT GCGTTCAAG CCGCAGGTGC CCACGGAGCA  
 GCGCCAGGCC TACGCCGAGC GCGTGNCGT GACCTTTTTT TAGGTGAGCC CTCTTTGCAA TTTCAACATC ACAGAGTCTG  
 TCACGGAGCT GGCAGGTTC GINCTGCTGC GGCATGGAT GGACCGGCTC TTG

SEQ ID NO:181: (Length of Sequence = 219 Nucleotides)

AGCTTTATCA CATTATACAC AAACATAGAA AACAGTGTTC CAGAAGAGAA GCAAAGGCCA TTGGCTTCAA ATATTTATGC  
 AACAAATGAAA ATGTCTCTAG CCTTAAATG AGCACTGTGT ACTTGTCCAA CAGTGAGATA ACTAGTCAAT GGAAGAGTTC  
 AACACTAGAG CATGTATCTC AGTCTGTTCT CATATTGCTA TAAAGGGCTS CCTCAGACT

SEQ ID NO:182: (Length of Sequence = 451 Nucleotides)

GTCTTACTCT GTTACCCAGG CTGGAATGCA GTGGTGTGAT CATAGCTCAT TGCAACCTCT GCGCTCTAGG CTCAAGTGAT  
 CCTCCACCT CAGCCTCCCG AGTAGCTGGG ACTACACGTA CATGCCACCA TGCCAGCTA ATTTTGTAT TTTTGGTAGA  
 GACGGGGTTT TGCCATGTTG ACTAGGCTGG TCTTGAAGTC GTGAGTCAA GTGATCTGCC TGCTCGGC TCCCAAAGTG  
 CTGGGATTAC AAGCGTGAGT CATGGTGCT GGCCTAGTTT GCTCTTATTT TTTTCCATC TTGTCAGTTT CTAGGCCACT  
 GGAACAGGC TGACAGCTC AGAGTCCACA GCTGTGAGGC TCCATGTTC ACCATCAAAA AATAAGGTGA CGAGAGTCTT  
 GGGTTTCCCA GTGTACGGC AAGAGGGTT ACTGCTCAG GGTACACACA G

SEQ ID NO:183: (Length of Sequence = 444 Nucleotides)

CCAAGTTGAC CCGCCGAACC ACCGAC-GGA AGAGTGAGTT CCTGAAACT CTGAAGGATG ACCGGAATGG AGACTTCTCA  
 GAGAATAGAG ACTGTGACAA GCTGGAAGAT TTGGAGGACA ACAGCACACC TGAACCAAG GAAATGGGG AGGAAGGCTG  
 TCATCAAAAT GTCTTGCCC TCCCTGTAGT GGAAGAAGGG GAGGTCTCT CACTCTCT AGAAGCAGAG CACAGTTAT  
 TGAAAGCTAT GGGTTGGCAG GAATATCCTG AAAATGATGA GAATTGCTT CCCCTCAGAG AGGATGAGCT CAAAGAGTTC  
 CACATGAAGA CAGAGCAGCT GAGAAGAAAT GGCTTTGGGA AGAATGGCTT CTGTCAGAGC CGCAGTTCCA GTCTGTCTC  
 CCTTTGGAGA GCACTTGCAA GCAGAGTTG AGGCTCAGCA CCGA

SEQ ID NO:184: (Length of Sequence = 399 Nucleotides)

GGCAGAAAGA GGAAGGAGAC AGTGCCAGGA GGAAGAAGGA AGGAGTCCCT TAGCTCTCTT CATGTCCCC TTTACTTCT  
 GCTATCTCT TCTCTCTT TCTCTCTT TGCTTATG CCGTATTTT TGCAATATG ACAGGCCTGC CTACCCAAGA  
 TCAGAACTCC AAAACCACTC CCACCCCTGA AGGTCCGGAG GGTCTTAGCA GCGCTGGTG GCTGCTGTG CTCAGTCTT  
 CAGCTCCATG GGAATAAATA ATGGCACCTT GAATCTCTAG GATTTTGTCA CTTTGGAGTC ACAGCAAAGT TCTCTCTCT  
 TTGTCCCCC GTTGTCTGCT CCTTGGGTTA TAGGACATGG TAAATATTTA TTACTTTTCT GGAACCAAGT TTTTATTAG

SEQ ID NO:185: (Length of Sequence = 263 Nucleotides)

CAGAGACT GCGCCAGCTA TTTTCAGCAG GGACAGAGTC GAGGCTCACT GGGATGGCT TCAGAGGACA CTGAGGCCCC  
 TCTCAGGAG GGCAGGCAC AGATACCCA AATTCACCC CAGTCCCA AGGTCTCCA GCGGGCTGT CAGTCCATG

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TCAGCAGAAG GCTCTTGGGC GTGTGAGGGA GGGTCTTGGG GAACTAAGCG AAGGAGGCAA ACGCCAGGGC  
CCCTTGCAGGCACC ATGTGCACCA CTT

SEQ ID NO:186: (Length of Sequence = 343 Nucleotides)

GTTC AATAG CTGGTTTAT TCTCAGCACA AAAGGGCCCT GTGTAAAAAC CAGAAGGATT TTGTAAAAATA TCAAAATGAA  
TATT TGGCCT GGAGGTTGGA AAGTGAAGCA AGGCTGGACA TAGAAAAAAA CTGATCAGTA GTTATTCAGG ATATTATTTA  
GGATAAATGA AATAGGAACT TAGGGGCATC TCTTACTTTT CTACAGGTTT TTATCTGGGT CAATGAAGAA ATTGTGTTTA  
TCTTGCTGCC CTTGCATCAG GTTTTTTGCA CTAATGGAAA AAAGCCGGCC GAAAAACAAA ACCCAATCCT TTCAGTCTTA  
GCTTTTACAT CTTGCCCTTG CAA

SEQ ID NO:187: (Length of Sequence = 229 Nucleotides)

GGTGGGGCTC CACCCCTTCC ACGTCATCOG CATCAACAAG ATGTTGTCTT GTGCTGGGGC TGACAGGCTN CAAACAGGCA  
TGGAGGTGC CTTTGGAAAG CCCAGGGCA CTGTGGCCAG GGTTCACATT GGCCAAGTTA TCATGTCCAT CGGCACCAAG  
CTGCAGACA AGGAGCATGT GATTGAGGCC CTGGCAGGG CCAAGTTCAA GTTCTCTGGC CGCCAGAAG

SEQ ID NO:188: (Length of Sequence = 284 Nucleotides)

CCAGCAACTC AAATTCACCA CCTGGACTC CTGGACCGC ATCAAAGACG AATTTTCAGCT ACTGCAAGCT CAGTACCACA  
GCCTCAAGCT CGAWTGINAC AAGTTGGCCA GTGAGAAAGT AGAGATGCAG CKTCACTATK TGATGTACTA CGAGAKGTCC  
TACGGCTTGA CCATCGAGAT GCACAAACAG GCTGAGACCG TCAAAAGGCT GACGGGATTT GTGCCAGGT CCTGCCCTAC  
CTTCCCAAG GAGCACCAGC AGCAGGTTTT TGGGGGCCAT TGAG

SEQ ID NO:189: (Length of Sequence = 215 Nucleotides)

GGAGGATGA GAAACAGATT TCTGCTCACT TCATGGGCTG RCTRGRATT GACGATGGTR CAAACCCAAG ATTATCCTCA  
TGTAATTTAT GAAGATTATG GAACTGCAGC GCATGACATC GGGGACACCA CGAACAGAAG TAATGCAATC CCTTCCACAG  
AOGTCACTGA TACAACGGT CGGGCACATC TCKCGGCTA TGCTGCGGT GTGC

SEQ ID NO:190: (Length of Sequence = 153 Nucleotides)

TTTCATATGG AAAGAGCTAG TACAATCACA TATTTGAAAG GAGAAACAAT AGGTACTGAA CCGGAGGGAA AGGGCGAGGG  
TGAGTGTGCC AGCACCGGCC TGGTGAATCC ACGATTGGT TTCCCATCCA AGGTAAGTT TCCCAAATA CCG

SEQ ID NO:191: (Length of Sequence = 316 Nucleotides)

GTATTTATAC ATTTATTTAT ATATGTATAT TACTTTCAGA NGAAACGAAC ATTTGGGGA CAGGAAGCAA GCAGGCCCGG  
GGCTGCTTCC CTCTAGCCC ACCTCAGAGT CAGAGTTGGC ACATGACAAA TACCAAGCTC AGGGTGAAGA ACTGGGAGTT  
AACTGGGAAG TAGGGKGGC TCTATGCACA CGCAGGCTTC TAAGGGTGCA CGGTATGGC AGKKGSTTTG CACTGGGAGG  
CCCTATGTAC AGCTTGAAAG CTAGGGGTGA GATTAGCCCA GTGACTACAG GAACATACGT CAAAGTTGAG AGAAGA

SEQ ID NO:192: (Length of Sequence = 360 Nucleotides)

GTGGTTTTTG GTTATATGCA GCTTTTGACT AGCATGTATT GTGTCTTTT CTCTCTATG AATAATTTTA TATTTTCATGC  
TACTTCTGA AAGTTTACTC TTTGATGCTC TAAGAGAACA GCCAGATGGT TTATATGAAT AANCTTTATC TGCAGGATGG  
TGGATTGGTA AAINAGGAGA ATGTTGTTTG AGATATCAAG ATTTATGTC GGGAACTAAA ATATATAATG CCAAATGTGT  
TTTTGTCAAT TACTAGAGAA TTCTGTGCAA ACATATCATC TCTTCATG CTGCACACTT TGCTTTTTGT TAAACAGCAG  
GTAGTAGACA GACCAATACC AGTTTGGGT TAAGG

SEQ ID NO:193: (Length of Sequence = 397 Nucleotides)

GAAAAGACCA AGGAGATGGT GAAGACAGCA GAAGCCCAGA AGCAGCAACT GAAGGAGGAG CAGGGGAGGT CAGCAAGGAA  
CGGGAGAGTG GGGATGGAGA GGCTGAGGGA GACCAGAGTA CTGGAGGGTA CTATTTAGAA GAGGACACCC TCTCTGAAGG  
TTCAGGTGTA GCGTCCCTGG AGGTTGACTG TGCCAAAGAG GGCAATCCTC ACTCTTCTGA GATGGAAGAG GTAGCCCCAC  
AGCCACCTCA GCCAGAGGAG ATGGAGCCTG AGGGGCAGCC CAGTCCAGAC GGCTGTCTAT GCCCCTKTTC TCTTGGCCTG  
GGTTGGCGTG GGGCATGCGT CTAGCTTTCA CTCTGGTTCA GGTCCAACAG GTCCGTTCT GTGCCTTTGG TGCCCC

SEQ ID NO:194: (Length of Sequence = 225 Nucleotides)

GATTATTGGC TTGCTTTCA TAACATGIAT TTTTAAGTAT TTAATCTCTT AATGGCCCTC GTGTCTATTT TATACATCAT  
ATCTCTTAAT TCTCTAGATG GAACACTGAA GGACAGGAAT TAAGTAAGTG ACTGGCCATG CAAGGGTTGG AAATTTTACT  
GTATCCCTTC CTCGTAGAA GTTATGTTAA ACATTCAAGC AACCACATAT CTAACAGAGG AGTTT

SEQ ID NO:195: (Length of Sequence = 294 Nucleotides)

ATTACTAGAT ATTGTATGT TAAATTATGT GGGTTTCAA ATTTGTGGAG AATAAGTAAT AGTGACATTA GTTTAAGGAC  
AGTGTTCAT CAGGGCATT TTTAATGAA TCTTATATTT AAATGTCTGT TTCAGGAATT CATGTGAATC TTTCTTTTAA  
TAGAGGACCC ACAGGCATGA NTTATTTACT CCTCCGTGA TAGGTTCTCA CCTGATGAA AGCGGAAGCA AATTCCAGGT  
TAGAACATTA TNCITAGTTAT GTAGGGGGT ATAAAGTGTG TAAGTTTAAAT ATTT

SEQ ID NO:196: (Length of Sequence = 233 Nucleotides)

TTATTTTCT CTAAATTTTA AAATAGAAGA CTTTAATGGA AAACATTTAG TACCATCATG TCAMCCTGAA TGCCAGCAAT  
ACCTOGACTT TTACACACGC AGGAAGCCTA GTAAAGCCC CGTCAGTAGT ACACATTTCT CTATGGTCCT TCAACAGTTT  
TTCATATACA AAATTTTCTG CTATTTTTC TTTTGCAAAC AGCAATAACT TTTGGGTTTC CCATATGACC ACC

SEQ ID NO:197: (Length of Sequence = 230 Nucleotides)

AAGATACTA CTGGAGTAG CTGTGCAGCC CCGCCCTCTG CTCCCCCAG CCTCAGGCC AGTGCCAGGA CAGCTGGCTG  
CTGACAGGAT GTGGCACTGC TTGAGGAGGG GCACCTGCCA CGCCAGAGG ACAAGGAAGT GGGGGCCGCT GGCCAGGGTA  
GGGAAGGKTG GGGCAATGGG GAGAGGCAAA TGCAGTTTAT TGTAATATAT GGAATTAGAT TCATCTATGG

SEQ ID NO:198: (Length of Sequence = 118 Nucleotides)

TTCTCCTGGG GAAAGGGCTG TTGCTGAAGT GGCCGGTTT TTTAAGCATC GACATTTGCA TCCAAAGGTT CAAGCAGCCG  
CCTCAGGTT CARAGGCTTC CACCTGATGG CTGCACTT

SEQ ID NO:199: (Length of Sequence = 268 Nucleotides)

TAAATGATGG AGTTAAATGA TGTTGTCAGT GCCTATTTAA AAACTACTC TTCCCTTCT CTATGAGTTC TACTTTGGTA  
AATATTAAATA TTTAACCAGT TAGTAAACT AACACCACTA TTTCAATCT CTTTGTGCA TAGTAAGTAA ATTTTGTCTT  
ACTTACTTTA TAAAAAATA CTTTACATTT TATAAAGCAG GTTTTAGAAA AACGGTTTAC AAGAAAGTTT GCCTCCATTT  
CACTGCCAAT TTAAGCACAG GGGAAAAT

SEQ ID NO:200: (Length of Sequence = 422 Nucleotides)

CCAGTGAGTT TGTGAAAAGC AACAGGGGTA NGACAGGTT CAGGAAGGAC ACAGACAGTG CCTGTGTTTA GGTTCCAAAT  
TTCTTCTTTT TAATGGGTGG TGGGAGCTGA GCAATGATGT CATTGTGAAG GGGCAATGAC TTGTCAATNA TGCAGAACAT  
GTAGGCATCA TGGAGAAGGA TGTGCATOGG TCTCTTGGGA TGAAALTA TGTGTGTGAT AGGATATTC CTTTGGAGCC

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AAAGGTGGTG AAAGCCCTGC TTCTGGACAG TCCGGCTCCA ATCTGTATAC TGTTTGCTG GGATGCTGTA CTCAAATACC  
TGCTGGTCCG AATGAGOGAT GACAAGGTG TTGGTATG GGGCAATAG CCATAGCAGT CACTTGGGAA ATTGTAAGCA  
GGCACCGTGC AGTGAAGTTT TA

SEQ ID NO:201: (Length of Sequence = 273 Nucleotides)

ACTCCACGCT GATGAACCG AGTCCATTT CTCCAAGAAA TTCCTGAACG TCTTCATGAG TGGCCGCTCC CGCTCCTCCA  
GTGCTGAGTC CTTCGGGCTG TTCTCCTGCA TCATCAACGG GGAGGAGCAG GAGCAGACCC ACCGGGCCAT ATTCAGGTTT  
GTGCCTOGAC ACGAAGACGA ACTTTGAGCT GGAAGTGGAT GACCTCTGCT TAGTGGAGTC CAGGCCCCCA GACTACTTGT  
TAAGAGGCT ACAACATGTG CACTGGGTGC CCG

SEQ ID NO:202: (Length of Sequence = 436 Nucleotides)

GGACTCCAAC CCCCCAGGAG GCGAATGCT GAGCTTGGCA ATGGTGGCCT GGATGGAGCT GATGGGCACA TCCCCACCGA  
GGACCAGGTC CTGGGAGTCC TGAGGAAGGT GGTTCCTCTG GCTGATGCTT GCACTGGCCA AGGGTTTGCA TGGAGGAGGC  
ACACCATGGC GCTGCAGGAC CTGCTCCAG TGTCTACCA CTGCCCTATA GCAGAACCTG AGGTGCAGCT TCTCCTGCAG  
CATGTGCTTT CTCGCTGCC GCATGCGCCG CACCAGCTGA GGCAGCTCAG GGATTCCCTT CCCAGCCTCC ACCTCCTGCA  
CAGCTGCATA GAGCAGTGCA AAGGCTCCCG TGCGGCCAC ACCAGAGCTG CAGTGCAAA TGATGGGCGT TTGAGGGGC  
CGTATGCAA GGTAAATTGC GTGCACCTCC TGGGTT

SEQ ID NO:203: (Length of Sequence = 336 Nucleotides)

CTGCATGINT TGGGGACACT TACGCCAAGG CGCGCGTTC TCATTAGGAG CTGGGACCAG AAGTGAATAA GCCAGGTTCC  
TGCTCAGGG AGCTCCATAG CAGGACTCAG AACCACACAC GGCCCTCTAG GCATTTTGA AGCTCTGTGC TTCATTTTTT  
TTGCTTTGCC TCTAGTTTTC CCTTTGAGT ACCAATGCAG CCAGCCCATG TKTCCCTCT ATGTGGAATG TTAACGATAT  
TCCCACGTG TCTGGTGTCC TTCTGTAAAT CAGAGCTGCC GTGACCATC CAGTTCAGGC ATCCTGGTGG CCTGGCTTTC  
TCTGGGGCAT AGAGCT

SEQ ID NO:204: (Length of Sequence = 393 Nucleotides)

GGAATCAGAT GCTCAGGTT CCAAGCAGGG ATAAGGACAG GCAAATAAA TAACCCCCA ACCCCCATCG TCACTCTGCT  
GCAACAGAC ACAAGGTTT AAAGATCTGG GCCCAAAGAC TCTGGGTCCC TTCAAGCAAG CTCAGGTGGA AGGAGGTTTC  
CCACCCCCC ACCAGGCTG TTGCCCCAG GTTGCCCTAG GATGGAGGCA GTTCAGACCC TGGGTCACTG AAGCTGATAG  
GAAGAACTNC GATATCAATG GCCTAAGCCT GCTGINTGCC CAAGGGAGCC AAGGGCAAGA GCCAAAGGC CAATTTAAAG  
GACGTGGACC TGGGGGGCCA GAGGAGGCAC CACAGCCGAG GGGAGCCACG CCCTGGGCCG GCAGGGCACA TGG

SEQ ID NO:205: (Length of Sequence = 390 Nucleotides)

GAGGAAGAGG ATGACCTGAG TGAGCTGCA CCGCTGGAGG ACATGGGACA ACCCCCGGCG GAGGAGGCTG AGCAGCCTGG  
GGCCCTGGCC CGAGAGTTCC TTGCTGCCAT GGAGCCGAG CCGCCCCAG CCGCGCCCC AGAAGAGTGG CTGGACATTC  
TGGGGAACGG GCTGTTGAGG AAGAAGAGC TGCTCCAGG GCGCCAGGT TCGAGCCGCC CGGTCAAGGG CCAGGTGGTC  
ACCGTACATC TNCAGAGTC GCTGGAGAAT GGCACACGGG TGCAAGGAGG GCGGAGCTG GTGTTCACTC TGGGTGACTG  
TNAOFTCATC CAGGCCCTGG TTCTCAGTGT CCACTCATG GAGTNGGGG AGACGGCCAT GGTCACTTCT

SEQ ID NO:206: (Length of Sequence = 172 Nucleotides)

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CTTTACTGTG GGTGIGGGTG TCACTGTCAC TGCCACAGCC ACTNGGAGGG ACACACAGCT TTAACCCCTR TTTGCTTAGG  
 NGAAGGGTGG GGGCATTGAG GGTATATAAA CTAACATATAT ACACAGAAGG TCCTAGGKAG AAAGCCACCC TGAGCACACA  
 TGCTAGGCA CA

SEQ ID NO:207: (Length of Sequence = 215 Nucleotides)

AAGGCAATTA GAAGATTTAT TGAATATTGG TTAAAAGTAG ATTGACAATG ACATTAAAGA ATAAAGTGTA ATTTATTGG  
 TGCTACTTTG TGAATGCTTC CAAGTACAAA TCATCTCACA ATACCATATA CAACATACIT TCAATCACAA CTCAAATATA  
 AAATAACCTA CAAAATCACA TTGCTATAAT CAATATACAA TAATTGTATT TTAA

SEQ ID NO:208: (Length of Sequence = 444 Nucleotides)

GGAGTTCTCT TGTCCACGGA GAGCAGTGTG GCAGTGTATG GAATGCTAAA TCTTACCCCA AAGGGCAAGC AGGCTCCAGG  
 TGGCCATGAG CTGAGTTGTG ACTTCTGGGA ACTAATGGG TTGGCCCTG CTGGAGGAGC TGACAACCTG ATCAATGAGG  
 AGTCTGACGT TGATGTCCAG CTCACAACA GACACATGAT GATCCGAGGA GAAAACATGT CCAAATCCT AAAAGCACGA  
 TCCATGGTCA CCAGGTGCTT TAGAGATCAC TTCTTTGATA GGGGGTACTA TGAAGTTACT CCTCCAACAT TAGTGCAAA  
 ACAAGTAGAA GGTGGGTGCC ACACTCTTCA AGCTTTGACT ATTTTGGGGG AAGAGGCATT TTGACTCAAT CCTCTCAGT  
 GTACTTGAGA CCTTCTCCC AGCCTGGGAG ATGTTTTTTG TATT

SEQ ID NO:209: (Length of Sequence = 338 Nucleotides)

GCAGATCACT TGAGGTCAGG AGTTCGAGAT CAGCCTATAT ATGCAAGTAC ACACACAGGC ACTCGCACGC ATGCATGCTC  
 ATGCAACACA CATGTACACT CTACATGTAC AGCTCACATA TGATCCATA CACATGTGCA TGCTACCCA TACACCAGCC  
 ACACACAAGT ACTCATACGC ATACATGGCC ACACACAAAG TACACACAG TACACCATAT GCATATGTAT GCACTCATAC  
 ACTCATACAT ATGTGCCCCC TCAGAGAAGT ACACAAGTGC ATGCGCATCA CACATGCATA CGTGCTCATG CATACACAG  
 GGACATTTCA TACACAG

SEQ ID NO:210: (Length of Sequence = 371 Nucleotides)

GAGGAAGTAG AGCCTNAGGA GGCTGAAGAA GGCATCTCTG AGCAACCCCTG CCCAGCTTGA CACAGAGGTG GTGGAAGACT  
 CCTTGAGGCA AGCGTAAAAG TCAGCATGCT GCAAGGGGAC TGATGATTTA ATGATGCGTT TTCAAGGGTA CACACCAAAA  
 CAATATGTCA ACTTCCCTTT GGCCTGCAGT TTGTACCAAA TCCTTAATTT TTCTGAATG AGCAAGCTTC TCTTAAAGA  
 TGCTCTCTAG TCAITTTGGG TCTCATGGCA GTAAGCCTCA TGTATACTA AGGGGGAGTC TTCCAGGTGT GACAATCAGG  
 TTATTGAAA AACAAAACGT GGTTTTGGGA TCTGTTTGGG AGACTGGGA T

SEQ ID NO:211: (Length of Sequence = 295 Nucleotides)

CCTCCCAACG TGTGACATT ACAGGCGTGA GCACACGCAC CCAGCCCATC TAGCATAATG TTTTGCATAG TTGTCAGCAG  
 ATAAATATTG AATGACAAA CTCAGATGGA GGAAAAAGAA CAAAATAACC TAGTTCTCAG AAAGATTTAA TGAGCAAATG  
 GGAAAATGTC AAAAAGATTT ACAGACAGGG GCATCTTAGA GTCACTGGAA TCACACAGGC CTTCCTCAG CTTGAGGGGC  
 TGCTTGAGG TGGGGGTGGG GGTACACCTC CTCAGTGGG AGAGACTTGC CAAAT

SEQ ID NO:212: (Length of Sequence = 370 Nucleotides)

TGGCGATAT GAGGGGGTG GGAAGTGGCC CCGGCTGCC CCGCGCCT CCCTATGTCA TTCTCGAGGA GGGGGGATC  
 CGCGCATACT TCAAGCTCGG TGCTGAGTGT CCGGCTGGG ATTTTACCAT CGAGTCGGG TATGGGGAGG CGCCCCGCC  
 ACGGAGAGCC TGAAGCACT CCGACTCTT GAGGCTCGG GGGGAGCCT GGAAATCGAT TTTCAGGTTG TACAGTCGAG

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CAGTTTGGT GGAAGAGGGG GGCCTAGAA ACCCTGTAGC GCAATGGGGT TGGGCGCCCC AAAGGTTAAG TTTGAACCCG  
AAGAGCAAAG GAAGAGGCGA TCATCATAAG TGGAGGATTA GGATTAGGAT

SEQ ID NO:213: (Length of Sequence = 302 Nucleotides)

ATCTGTGGAA TAATCTGCGG GCTAACACGG ATAACCTAGT ATAAGAACCA CCCAGTTGAT GTCTATGTGT GCTTTTAAAT  
AGGAGGAGGA ATTGCACTGT ACTTGGGCTT GTATGCTGTG GGGAAATTCC TGCCCACTGA TGAGAGTATG TTTGAGCACA  
GAGACGCCCT CAGGTCTCTT GACAGACCTC AATCAAGATC CCAACCGACT TTTTATCTGC TAAAAATGGG TAGCAGCAGT  
GTATGGGAAT TTTCTCATAC AGAAGGGCAT CCTCAAACC GGAACCACA GAGATGCTAG GT

SEQ ID NO:214: (Length of Sequence = 354 Nucleotides)

ATGGATGAGT GGGCACCCCG CACAGGGCTG CAGGGTGGAA AACGCTCGAC GGCCAGGTGG TGACTTGGGG GCAGAGAGCG  
CAGTGINGTA GGGGAGGAGA GGTGGTGTCC CTGCTGCCCTG GGAGCCAGCC TGCCCTGINCT GTGGGCAGAG CAAGGCCTTT  
TCTGCTGCCG GTGCTTCAG GGCTAAGCA GCGCTGCAC ACTCACCAGC GCAAGGCTCC TCTGCAGGGA ACGAGGGCTG  
CTACCCATTT CACAGATGAG GGCAAGCAAG GACTTGCCCA GGGTTGCCCA NAGCAAGTGC GTAACAGGCC CTGAGAAGAG  
NGCCAGTGAG CTCATCTGA GTTAATTATG GGCT

SEQ ID NO:215: (Length of Sequence = 260 Nucleotides)

TGGTCAAAG TCTAGGCCCT CTNAGAGCT GGCTGATTCA GCTTGCCAAC AGTGACATCA GGGTGAGGCT TCCTCTGTCC  
ACAGCATTAG CTGCGAATAT CCTCATGGTC ACAAGATGSC TGCCAGTGGC CGTCAGGGTG TGTGCTTCCT TGTTCACATC  
CAGTGAAGA GTGACAGCCT GCTCCCTTA GCTCTCTGAC ACCANTGTGA AGGTGCCANG AACTTACTAG CAGGNCCTTC  
CTCATGACCC ATTCAACAGG

SEQ ID NO:216: (Length of Sequence = 232 Nucleotides)

CTTGACAAG ATCTGGGATA ATTCTCTGGA TTACCTGGCA GAGACTTTTK TTCTCTTCCC TTA CTGTCTC CCAATAAAC  
AGTCTCTCAC TCTGTTGTA GCCACCTGAA GCTGTGATAT TTCCAACGAC TGTAGGAGGA AAAAATTAAG GGGAGAGAGG  
AAAACAAAAC CAACCAACCC CTAANATCAT TTTTATTATG TACATAACGA CCTCATCTC CTGTATATGC GG

SEQ ID NO:218: (Length of Sequence = 219 Nucleotides)

CTGCAACCAT CCATACCTTT TNCOCGTGGC TGCTATGGAG TCCCCAAAC TCCCCAGTGG GGCCTATGAG GGTGGGGCAC  
TTATTANGIN GTCTGGGAAG CTCATGCTGC TCCAGAAGAT GCTGCGAAGC TGAAAGGAGC AAGGACACCG AGTGCTCAAT  
NTTCTCGCAG ATGACCAANA TGTAGCCTT GCTTGAGGGC TTTCTTAGNC TATGAGGCT

SEQ ID NO:219: (Length of Sequence = 390 Nucleotides)

GATAGGTAGC AGAGACCAAG GGCAGGGTG CTTGAGATGA GCAAGAGAAC CCAGTGAAC CAGATACCCC AGGTGGGCGG  
GAGGGACCCC AGACCTTCAG AGGGCTGCC TGGTGTCTC CACAGTGCAG TCCCTCTGTA TTCCAGAGT GGGATGGGG  
CTTTCAGCCC ACCGTGATGC CTGCCCTCCA GGATGGCTGG TTTAGTCTGG GTCCATGTCC CAGACCCCTC TATTCTGCTC  
CAGGACAGCA GGA CTTCAGG TCTTCTCTGG GGGTGGATAT AGGAGAAAAT TTCTGCCTGG CACACACCTG GGCTCCAACC  
ACTTGCCAAG TGATTCACTC TTAGGCCAG GGGGAACACA ATGACTATCA TTA CTGATGC AGACCTGGCT

SEQ ID NO:220: (Length of Sequence = 382 Nucleotides)

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TTTTTGTITT GTTTTAATAT TTTTGATATT CTCTTTGCAT TGAAATGGTA TAAATGAATC CATTTAAGAA GTGGTTAAGG  
 ATTGTGTTAG CTGGTGTGAT AATAATTTTT AAAGTTGCAC ATTGCCCAAG GCCTTTTTTG TGTGTTTTTA TGTGTGTTTG  
 TACATTTGAA AAATATTCTT TGAATAACCT TGCAGTACTA TATTTCAATT TCCTTATAAA TTTAAGTGCA TTTTAACCTA  
 TAATGTGACA CTATAATATA AGCCTAAGTT TTTATTCTA AGTTTTATG ANGTTCTGAT CGGTCCCTT CAGAAATCTT  
 TTTATATTAT CCTCAAGTT ACTTTCTTAT TTATATTGTA TGTGCATTTT ATCCATTAAAT GT

SEQ ID NO:221: (Length of Sequence = 314 Nucleotides)

GACTTTGGTT TATTTAAAAA ACAAGCCAAA AAAAAAAAAA AAAAACCCCA ACTTTATATA CAAAGTCAAA CTGAAACCAC  
 GGTATATGGA AAGAGGCAAG AWTATGGGT AACAGGGGAG AAGGCTGGGC CAGAGCCAAT ACCACATTCT GAACACAGGA  
 GCCACGGGAA AGAGGTGCTG GTTTCTTCTG GCAAGACCGG GGTGACTGGA ACGCAGTGGT CCTACTGGCA AACCCAGCCC  
 AACACTGAGC TCTTCTAGC ATGGACTCCA TTCCCGTGAT TGGCCAAGGG AGACCTTCC CCCAGGAGGC CTGT

SEQ ID NO:222: (Length of Sequence = 342 Nucleotides)

TTCTTCTCT GCGCGGCAC GTCCGACGCA GCTGCTTCG CCCCGTCGTC AACTTTGAGC TGGAGGAGAA GCAACTTTGG  
 CAGTGGCCGC GGGGTGGGAA TCCCGCTTCT CCGCGCAGC AGTAGGCTCG CAAGTCGCTG GGGTTAGGTG GGGCAAGAGT  
 TTCGCCGCG CATCAGCGCT TGCTTCGGAC TGTTCGCAAC GGTTCCTCAG CGAGCTGGGA GCGGGGGTTG TGACTGCGAG  
 TCGTCTGGGG GAGGGGGACT GTTTTTCTT TTCCTCTAGA GACCTCGCT TTCAACTGGA TCAACGTTG TCGAAAGGAT  
 GTAAATAGGC AAGAGCAAAC TG

SEQ ID NO:223: (Length of Sequence = 376 Nucleotides)

GTGATGGCTG CCTTGAGGGG GACCATCATG TCGGAGACGC ATTGGTGAGC GTCTCACCCC ACAGCCCATG CCCAGCCTCC  
 TGCAGACTCA GGTATCCAG CTGGTCGATG GCTCTTTGCA TACCTGGTGC CTCTCCTCT CGGCTTGGC AGGCTTCTCT  
 GGGGGCTTCT CAGATGACTC TTTTGCTTC TTCTCTGTCT TGGCTAACTC CTGGCCAGC TCTGAACGTG CCTCCTTGGC  
 TCCCTCTCT ACCACCTCT CCCGTTTGGC CAACTTGCTC ACGGCCGTCT TGGTAGTGGC TTTGAGGCTC TCCTTGCTAT  
 CAGCCCGCTG TTTGATTTG CTGGCTTGA GGTGTGTAAG GCACAGCCCC AAGAAG

SEQ ID NO:224: (Length of Sequence = 445 Nucleotides)

GTGATAGAC ATGGGCATTG GGGTGTCTC CACCTTTGG CTGTATGAA TAATATTGCT ATGAACACTA ATGTACAATT  
 CTTTGCTGA ACGTAAATGT TTTCAATTTCT CTGGGTATT TATCTAGAAA TGAAATTGCT GTATGTAAAC CTTTGTTTA  
 ACCTCTTGAG GAAGTGGCAG ACTTTTCCAA AGCAGCTGCA CCATTTTAAA TTCTAACCCAG CAGTGTGTA GGGTTCCAAT  
 TTCTCTATAT CTTTGTTAAC ACTTGTATC TGCCCTTTG GTTAGAGACA TCCTAGTGAG TGTGAAGTGG CATCTCACTG  
 TGGTTTTGAT GTGCATTTCC CTGATAGCTA ATTGTGTGGA TCCCTTTTGC TTTTAGTGGA ATGAATATC TGGTAGTCTC  
 GTATGCCAAA CTAAAGCTAA AATTAAATG ACTCTGCATG ATGGA

SEQ ID NO:225: (Length of Sequence = 403 Nucleotides)

TGCTCTCGGG ACAGTTTCCC GGGCAGCTCC TGGCCAGCTT CCAGCCGAGA GTCTCAAGT CCAGGCGACC TTGGGCCAG  
 GCGAGGAGA ATCCGAGGTG GTCCGTGGTC TACCTGGGC CTCTACTCC CCAGCACCCC TGGAGGAGGC AGGGGCTCCC  
 CGCGCCGAG GCTGCCTGCC CTAGGCCAC CTCTGCATGC TGCTCATGGG GCCACCCGTC CTCTGGGCC CTCCTCTGC  
 CTAGGGGAGC TGGGCCAGGC ACTAGCCTTT GCCAGGGAG GTGGGCTCA GGCTGCCAG GTGCCTGCAC CCCAGCCGG  
 CTCTCTGGG GCTCCCTCT CGTCAAGCCT ATATCTGTG TGTCCCCACC CCAGCTGTCC CTGCCAGGG GACTGGCATA  
 AAA



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SEQ ID NO:226: (Length of Sequence = 440 Nucleotides)

GTGCCTTAAG GAGAGAGATT GTGTCTTCC TCTCTCAGGG GTGATAACTC AGGAAGCCTC TGGGTGGGA AGACCATCAG  
 TTCTTTTGTG TTAGGTTTCT TTCTCTGTCC CTCTTCATC CCCAAGATGT GACCCCATAA AAATTTTTC TTAGTTGGCC  
 AGGCATGGTG GCTCAGCCT GTATCCCAA CACTTTGGGA GGCTGAGGCG GGCGGATCAC GAGGTCAGGA GTTCGAGACC  
 AGCCTGACCA ACATGGTGAA AACCCCATCT CTACTAAGGA TACAAAAATT AGCCGGGTGT GGTGGCACAC ACCAGTAAGT  
 CCCAGCTGCT CAGGAGGCTG AGGCAGGAGA TTTGCTTGAA CCTGGGAGGC AGAGGTGCA AGTTAGGCGG GGATTGCGCC  
 GTTTGTACTC CAGCCTGGGC AAGCAGAGCA AGACCATCTA

SEQ ID NO:227: (Length of Sequence = 426 Nucleotides)

GACCAAGAAG TTOCGTTTG AGGAGCCCGT GGTCTGCCT GACCTGGACG ACCAGACAGN CCACCGGCAG TGGACTCAGC  
 AGCACCTGGA TGCCGCTGAC CTGCGCATGT YTGCCATGCG CCCACACCG CCCACGGTG AGGTGAGCG CCACTGCTATG  
 GACGTCATG TCCGCGGCG TGATGGCTTC ACCCGCTCA TGATGCGCTC CTGCAGCGG GCGCGCTGG AGACGGGCAA  
 CAGCGAGGAA GAGGAGGAG CGCCGCGCT CATCTCGAC TTCTCTACC AGGGCGCCAC TTGCCACAAC CAGACAGACC  
 GCACGGCGA GACCGCTTTG CACCTGGCG CGGTACTTA CGCTCTGATG CGCAAGGCG TCTTGAGGCC AGCGAAGATG  
 CCAACATCAG GCAACATGGG CGAAC

SEQ ID NO:228: (Length of Sequence = 278 Nucleotides)

CAGGACCAGG AGAAGATCCT GGAAGATGCA GTGGATGAGT GGACGGGCTT TAACAACAAG GTTAAAAAGG CCACTGAGAT  
 TGTTTTAGAA AACCAACAGC AAAACACTGA CAAGGTACAT AAATACAGAT TGGACATTTT AGGGTAAATT CACTGTATTT  
 CCTACTTGCT TGTAGGAAAC CGAGTAAAGT GGAAAAGCTG TCCTGATCAT ATGGCATGCA CACCAGACTG CAAAAGGNG  
 TCCACACTAT TTAACAGGAC TGTGGCAAAA TAGCTTTA

SEQ ID NO:229: (Length of Sequence = 425 Nucleotides)

TTTTTGTTC CAAGCCTTTG TGAATGACTT TAAATCCTCT CACCTGCAGA ACAGAGATGG CTTCAAAGTG GGGAGTGAGG  
 GAGTGAGCGA GGACCCCTGG CTGAGACCTG TTTTCTTCC ATTCTGCTG TGGCTTCCA CAGCTCCCTG GTTCCACACC  
 AGGCCCTGCT CTGCGCAGA AAATGGATTC CCAGGCCACA GAGCTGTGAG GCTTTGACT TTGCAGAGAC CAAGCACCCC  
 AGAGGCTGTG GCAGAGGCT AGTCCCTGGT GGGCGGCTCT GGGGCATGGG GGGCAGGGAG ACTGAGAGAT GGGGAGGGCG  
 TTGAGAAATCC GGGGGTCTT GGATACTTGA CAAATTGGCT CAGGTCTTAG CTYTGCTGTC CCCACTGATT GTTTTGCTTG  
 GCAAGGTGCA AGTYTTGGC TGTT

SEQ ID NO:230: (Length of Sequence = 382 Nucleotides)

TTGGAGGATG TGCTGCCCC CTGTCAGCAG GCGAAGAGC TGACAGGGG TGATGAGCAA GGCAAGCGG AGGGCTTCCA  
 GCTGCTGCTC AACCAACAGC TGGGTATGG AAGCGGCGAG GACTTCTCT GCGCGCTGGC CCGAGCTAC AGTGACATGT  
 GTGAGCTCAC TGAGGAGTG AGCCAGAAGA AGTCATATGC CCTAGATGGA AAAGAAGAAG CAGAGGCTGC TCTGGAGAAG  
 GGGGATGAGA GTTCTGACTG TCACCTGTGG TATCGGTGC TTTGTGGTCA GCTGGCTGAG CATGAGAGCA TCCAGAGGCG  
 CATCCAGAGT KCTTTAGCT TCAAAGGAGC ATRITGACAA AGCCATTKCT CTTAGCCAG GA

SEQ ID NO:231: (Length of Sequence = 398 Nucleotides)

GAGGCTGGAG AATCGYTTGA ACCCAGGAGG CGGAGGTGCG AGTGAGCGA GATGGGSCCA TTGCACTCCA GCTGGGCCA  
 GAGCAAGGTT CTCTCTCAA AACTTGGAA ATCTGTTGGG AAGTAGGGG AGGGCAAGGT TAAACCTAT CTAGGTGTGT  
 CAATTAGACT TGTCCAACT TGAGAACCTG AATTTTGCAT GTAATTGAAA TGTTCAGAA CAAGTCTGGC AGTTTCATAA

GGGAGTTTTT AGATGCCAAT ACATTGCAGA TAACCATATT GGTTACATTA GGGGAATGAG CATGGGATAG GTGCCTCCCA  
GTTGGTAGGA TAGCATGAGG AGGTTTCAAA AGTAACCSCT TTAAGGGTAA TGTCCAGTAT TTGCTAAGTA ACCAAGGT

SEQ ID NO:232: (Length of Sequence = 272 Nucleotides)

GGGGCTGCAG ACTGAGTTAT TTTATTTTCG TATTTCCAGT TTGAAGCTAC TATCATGGGC GTTTAGAGTT ATACAAATGA  
CACTTACAAA AAATAAAGA CCAAGACACC CAGAGTGAGA TGCATGTTGG GGACGGGGGA GGCTGGCAGC AGGGGGGCCC  
CGGCGGYTCA CCCAGGGCT CCCGAGGGG CGACGCCTGG CTTTCATCCAC CCGGAGGCC CAGGGAGCAC CAATCACAGC  
AGGGGCTCTG GCCCAGGTGT CGGCAGCCCA GG

SEQ ID NO:233: (Length of Sequence = 364 Nucleotides)

ATTTTACAGT TTTATTTTAA AATCATTTCAC ACATATTCAT ACAAAGAAAA ATAAATTTCA GGATGGAATC CTGGGGACCA  
TGGTAGTTTA AAAAAAAAAA TCTCTCTGAT CATTAGCTAC TAAAGACANG GCAAGAGGCT TAGCAGTCAT TTCTGGGGGT  
TAGTGTATCT CCCCATGCAG GGGACAACTG NGAAGAATCC AAGCTGCTCC CTCATCTTCC TTCGATCTAG ATGGGGGAAG  
GGGATTTTCC AATGCTCTCC CCTAGAAACA TTTCAAGAAG TACAGCAAAG GCTTATGGTA ACACTGGAAC CTATTGCTA  
GAAATCTGGC AAGATTGCAC TTTCTGAACC CAATTTTCCT ATAA

SEQ ID NO:234: (Length of Sequence = 217 Nucleotides)

GGCCAGGAGC CAGAGGGCCC CGGGCCACC CTTGCCGGG AACGTGATGA CCAGAGTCCA GACAGTGTCC CAGAGAGGCC  
GCGGCCCGCA GACCGGAGGC TCTGTCTGCC CTNCGTGGAC GCCTCGCCAC TCCCAGGGAG GACGGCCTGC CCGTGGCTGC  
AGGAGGCCAC GCGGCTCATC CAGGAGGAAT TTGCCCTCGA TGGCTACCTG GACAATG

SEQ ID NO:235: (Length of Sequence = 221 Nucleotides)

AACTTTAAAG TTAGGATTTT AAAATATTTG TAACTGGCTA AATTTTAAAG TGTGACAAA TAATTACTTA GGTTCAGAAA  
TATACACACA CTTACTCTTT AGCCAGTTTC TTTCAAGGTN TTACTGTCCC ATCAGATATC TAGCCATTTK CCTTTGCAAA  
TTACATACCT TCTTAAGAGT GTATTTTAA GATTATTACT TATGCTTTAT GATGATATAG T

SEQ ID NO:236: (Length of Sequence = 221 Nucleotides)

ATAAATGGGT TTCTACTCC TTAGGGACAC GATTGGAAAC AATACATCCC ATGAACACAG GTGAATGTCC CTGGTTATCC  
CTGAGCTGGG CAGTTTCACA CAATCANTTT TNCCTGAGG CCAAAGTCTG TGGTTTGATC ATCTTAGCAG CTTCCAGAAC  
AGAAAGTAGG TTTACTTTGT CTCCAAANTC TNATTCTCGG TGCTCAAAGA AGAATGACCT G

SEQ ID NO:237: (Length of Sequence = 251 Nucleotides)

GACATCTTC TAAGATTCTC TGTGGGAAAA TGACTGTCAA TANAATGCGG GTTCTGCGG CATTCGTCTT ACTTTCATTT  
TTTGATTACA AATTTCTCTT GACGCACACA ATTATGTCTG CTAATCCTCT TCTTCTAGA GAGAGAACT GTGCTCCTTC  
AGTGTGCTG CCATAAAGG GTTTTGGGAA TCGATTGTAA AAGTCCAGG TTCTAAATTA ACTAAATGTG TACAGAAATG  
AACGTGTAAG T

SEQ ID NO:238: (Length of Sequence = 327 Nucleotides)

GTTGCTGGCT GTCACAATAA TGCTGTGATA ATGCTGTGGT TTCCAGCAG GGAGGTGGGA GCGGGAGGG GGCTGCAGCC  
TGATGAGAGC CAGCTGAAGG AAGAGCTGCC TCTCCCTTCC TAAGCCCTT CCAAGGTCT GCCCACCGC CCAACCAAA  
GACCACTCCG AACAAAGTGA GGATGTGGAT GCTCTGCTG GGTCCGCTGT TCCGAGAGG GAAAGAAAG GTAGCTGCAC

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TGACCCCACT GTCCCATAT ACAAGGGTTC GGGGGCAAGA GCATGTGGCT ACTCCAGCA AGGGRAAAAT GGGAGGAGCA  
GTAGAAA

SEQ ID NO:239: (Length of Sequence = 285 Nucleotides)

ATTATTAGTT TATGGTGCTT TAAACCTATC AAAATAGTTG TAAGTAAATG GATTTCCTGT NCTCCCAATA ACAATTCTCT  
GAGCTAGGAT AGATGTCITT CTGGCCATTT TACAGGTGAT GACACTGACA TAGGGACTGA GTGGGTAGCT TAAGTCCAT  
GGTTACCAGG AGCAGGACCN ACGTTTCTCTG NCTCCAGTC TCATCTGTT TTCCACTGAC CAGGTTGGTT GCTCCCTTGG  
AAAGCAGTCC CTGAGAGTTG ACTTAGAAGT TCAGGGNGAA GAGGT

SEQ ID NO:240: (Length of Sequence = 349 Nucleotides)

TTTTGCCATG TTGGACAGGC TGATCTCAA CTCTGGCCT CAAATRATCT GCCCAGCTTG GMCTCCCAA GYGCTGGGAT  
TACAGATRTG AGCCACTGCA CCCAGCCTGA CATGCCATAG TTTCAGCAIT TTCTTGGGCA ATGATCCAAG CTGAAGGCTG  
GTCTGAGGGA TCTSAAGAAG CGTATGAGTT GGAAGAGAGG GACAGAAAG AAGAAGACAT GTGAAGAGAG AAAAGGAAGG  
AAGCTAGCAG AGGAATGCCC TCCAATAGAG ACTGCTGCCT GAAGCTCAGC CCCTCTGAAG ATAGGTAGGC CAGGCTGGCT  
TAGCTGAGGC AGTGGGTTAG ACCAGCCCT

SEQ ID NO:241: (Length of Sequence = 233 Nucleotides)

GTGCAGCGGT CTGCCCTCAT CTTTTAATGG CCGGTGCGGT ACAGTTAGTG GACAGACGGG GGTGGGACA CAGCAGGGGT  
GAAACAGGGC AGTCACAGCC GGGGCCGGG ATCTGGAAGC GGGGGCGGTC CTCCCCCTGG AAACACCGTN TCTGGAAGGA  
CACCCTAGG ATCCCTGAC CTCARGGTGC CACCACAGC GGCTGGTGT TCTGGGAGGC CCGGCTKGAG TGA

SEQ ID NO:242: (Length of Sequence = 372 Nucleotides)

ATAATGACTA CATTGGGTGG AATACGCATG TACAATCTT CAAAAATAGT AAAGAGCAA ACAACAAA AATAGTAGAA  
GCACTGGAGA AATACACTAT GGCATAAACT AGTTACGGGT GGGATGTCAC ATGGACATA TCTACACTCT GTGGCAACCT  
TCTTACCTGA CTCCAAAGGA TCAGATAATC AAACAGGAAA TTATGGTAGG AAATCAGAAA ATTGAAGTAT GCATTATAT  
CCTAAGCATT TTATTTTAGC TCAAAATATA AAAATATCA TCAGTTAGCC AAGCTTTTGN GATGAGAGAT CATAGCCTCC  
TCTTTGATAG GGGGTTTCTT GGGTTTCCTT GATTTCATGT TTCAGAGTTT TT

SEQ ID NO:243: (Length of Sequence = 256 Nucleotides)

CTCACACATT CATACCCAAG GAAGAGGCAA ACACACTCAA GTCCAGAGTT CCAGTGGTG CCGCCAGAC CTACTGTCCC  
GGGGGTGTTA TGGCTGTCCC TGGCTTCCC CAGAGCAGCC AGGACAGCCT GCACCGNCTN CCAGACTCTC GCAGGAAGGG  
GAGCTCTGCC CTGGGGAGGA AACTINACAGG CTGGGAGACA AGACTCCAT CGCAGGGACA TGACAGCAG CAGCCACAGC  
CCGCGGACG GGGCAT

SEQ ID NO:244: (Length of Sequence = 220 Nucleotides)

CAAATGGCAG TTCTCGAGAA TCGACGAGGA ACTTAAATCT GGAATCAGGG TTTCAGTGG GTCTCGACT CCCACCACC  
CGCCCTCG NCTGTCTGCG CGCCAGNGT GACCTCCAGC CGAAGGAATC TTCTTCGGAT GGGTGCACCT TGCCAANAGG  
TGTTGCACCT GNGGACTAG GAGGCGCCTC CANACTAAGG GCGTCANTG CGGCTTCTT

SEQ ID NO:245: (Length of Sequence = 239 Nucleotides)

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TTCATGCTCA TGTAACCTTC TTAATAGTGC CTGTCTGCT GGGTTTGTAG CTGTAAGAGT TCTGCAAACCT GGCCCTATAA  
 AAATATGTAT GCTGTCCATT AAAATGAATC TCTCTCTCTC ACTCAGTCTC TCTCTCTGTC TGTCTCTCTT TCTTCTCTCT  
 CCTGCCATGT GTGTGTCTCT CTCTACTCTCT CTGATTITGN CCTCTCTCTC TATTCTGCTA CTCTCTCTCC TCTCTCTCC

SEQ ID NO:246: (Length of Sequence = 269 Nucleotides)

GGTTTCACCA GGGTTTAATG TGCTCTGATG TTGACCGTCC CTCINAGTNT TCTGGGGAGG AGGGGGTGGG GCGGAGGGTC  
 AGGAAAGCAG GCTCAGCTTC CAGGGTCAGG GAGTTGTGGG CCCAGAGGGG CTGTACACAGT GGATGCACCC TGCCCCCTCC  
 CTCGCCAGAC CCGAGGGTAG GGCAGAGGCA CCTCTCTGNC AGCCTINTGGG CTGCACCCAC AGGGAATNGA GGGGAGGGGC  
 ACCATTACCA CTGGACCCAC CAAAGACCC

SEQ ID NO:247: (Length of Sequence = 297 Nucleotides)

CTATTCAAAG TTTACTGACC TCCCCAGCCA GGCAGGCCAA CCTTCCGAG CAGGGGAAAT GTCCATCTAG CTGCCCTCTG  
 CTGGGTGCA GCCTATGCCA TGAGAGGGTA CTGGAAGCAG GAGGGAGCCC TGGCTAGGGC AGGCCTTAA CGCAAGGGAA  
 GCTGAGCAGA GATCTGCACA CTCAACCCCA TTTGATATTC TTCTCTCTCT CAGTCATGGC CAGCGTGTG GTGACTAGAC  
 CGGTGCCAAT AGTCCGGTGT CCATCTGCA GGGTGAAAAG ATGGCCTTTC TCTTAAG

SEQ ID NO:248: (Length of Sequence = 281 Nucleotides)

ACAACAAGCA CACCAACTAT ACCATGGAGC ACATCCGCT GGGCTGGGAG CAGCTGCTCA CCACCATTGC CCGCACCATC  
 AACGAGGTGG AGAACCAGAT CCTCAGCCGC GAGGCCAAGG GCATCAGCCA GGAGCAGATG CAGGAGTTCC GGGCGTCTTT  
 CAACCACTTC GACAAGGATC ATGGCGGGGC GCTGGGGCCC GAGGAGTTCA AGGCCTGCCT CATCAGCCTG GGCTACGACG  
 TGGAGANCGA CCGGCAGGGT GAGGNOGAAG TTCAACCGCA T

SEQ ID NO:249: (Length of Sequence = 383 Nucleotides)

AGCGCATCCA CACCGGGGAG CGGCCCTACC CTTGCTCTTA CTGTGGCAGG AGCTTCCGCT ACAACAGAC ACTCAAGGNC  
 CACCTCCGTT CAGGCCACAA TGGAGGCTGT GGGGGTGATA GTGACCCATC AGGTACGCCA CCCAACCCAC CAGGTCCCTT  
 CATAACTGGG CTTGAACTT CTGGCCTGGG TGTCACACT GAAGGTCTAG AGACCAACCA GTGGTATTTG GGAAGGGAGT  
 CGAGGGGGAG TTTTGTAAAT CCAATCTCT GTGGNTTCAT GCTTTGTATA TGCTCAGAC AGGCACAAAT AATCCAAGAG  
 AAGGTCTGTG AGCCCNATC CAACACCCAC AGTAATTATA ATCTTGGCAC ATCAATGGAA TTT

SEQ ID NO:250: (Length of Sequence = 397 Nucleotides)

GTATCTACG TTACAACAAT AATATCATGG GAGAAATAGA AATAGCCTAG TTGCTTCCA ATAGAACTG CTTTAAACAT  
 GGGCTGTATA TAAAAATATT AAAGAGAAAC AAACTGTAC ATTTCTCAT TGCTCCGCTA CAGACAACC ATGTACATAAC  
 CTTGTTGCAA ATATTTTCT CCTATAGCAG TAAGTACAGC ATTAGAAGGT GATTAGAGAG TCTGTTGATG AAACACAAAT  
 GTATGTTTTT ATTGATTTT ACTTTAGAAC ACTACAGAGT TCCTGGGACC GGGTGAANG GCATTTAGCT GGGGTGGTTT  
 GTGTGGGGT TAAATACCTT CCCACTTGCA AGTGAATTGC CTGTNCCGC TGCGGGAATC CTGTNCTTG GGTGGGA

SEQ ID NO:251: (Length of Sequence = 276 Nucleotides)

GGCCATAAAA GAAAGAGCCT GTTACCTATC CATAAACCCC CAAAGGATG AGACGCTAGA GACAGAGAAA GCTCAGTACT  
 ACCTGCTGA TGGCAGACC ATTGAGATTG GTCTNCCCG ATTCGGGNC CCTGAGTTGC TCTTCAGGNC NGATTTGATT  
 GGAGAGNGA GINAAGGCAT CCAAGAGTC CTGGTGTTCG CCATTGAGAA GTCANGACAT GGACCTGCGG CGCAGCCTTT  
 TCTCAACAT TGTCTCTCA GGGAGGGNTC TACCT

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SEQ ID NO:252: (Length of Sequence = 314 Nucleotides)

CCTGAACAGT CTGTTTCATT TGA CTGTTTG GGGGTCTCCC AGTTTAAGCA AGATATTAA GCCTTATTTT TCCTGGCATG  
CTTGGATTCC CCAGTAAAAA AAACCTCTGC CCTGGGCTGA CAATCAAAGT TCTGGGAAGT AATATGGATA AGCAAGCTGG  
AAATGGAGAA GGCTATTCAC TGIGCCTGGG TCTACTGTT TTCTGNTGG GAACTGCTTT TCATTAGGC CTGGTGTGCC  
CTGGAAGGGA NGAGCCTCTT GCAGAGACTA CAATCTTGA TGGTCTCTT GCCAAGTTT AAGGTAGGAA CCA

SEQ ID NO:253: (Length of Sequence = 293 Nucleotides)

GAACACTCTG CTCAGCCAA GGTTGTGAGG GCAGCTGTTC CTAAACAGCG CAAAGGCAGC AAGCCACAGT CCCACAAGCC  
TCAGCCTACC CGTAAACTGC CACCCAAGAA GGACATGAAG GAACAGGAGA AAGGAGAAGG GAGTGATAGT AAGGAGAGTC  
CAAAAACCA ATCAGATGAA TCAGGGGAGG AAAAGAATGG AGATGAGGAT TGCCAGCGAG GCGGGCAGTA GAAGAAAGGA  
AACAAACACA AGTGGGTTC ATTACAAATA GACATGAAGC CTGAAGTGCC CAG

SEQ ID NO:254: (Length of Sequence = 413 Nucleotides)

CTTTTCTTA ATATATTAA ATTTACCAAG GCAAGACAGT GATTTATGGA CATTAAATT AGTTTAGCTT TGTTCTGCTG  
TTCTAAACA TTGTGACTG TCTGATAGAC TTTTAAAAA CAGTGCTTTT CCAGGATGAT TTATGATATG CAGTATTGTT  
TATAGATGCC CATGGCTTAA CCTTGAAAAG TCAATTAAGT GACACAATTA AGAGAGATAT GAATAGTGGT AGAAAAAGCA  
TGACTCTGG ATAAGTGGG GTAAATCTAG TATTGTAT TCTGTGAGT AATATTGTCA NTAGTATTTT TTAGAAGGTT  
TAATTTTTT ATGGGTATA AATTCATGTC ACTCTCTGC AATGGGTACC ATCAGTGGGA ATGCGGAAT TATCCATGCT  
TTGGGGGTA AAA

SEQ ID NO:255: (Length of Sequence = 376 Nucleotides)

GGTCCAGG GAGAATCAAT ATATCTAGTA TAGTTTATAT TTGTACCTTC TCTCCTAAG AGTTACAGTG AGTGACTCTA  
CTCTCAAT GGAGCACCTC TCTCCAGGAG AGTAAGAAGA TCACATAAT AGAAAGTGAG CTTGGACTC TAACAGACAT  
AGGTTTATAT TCAACTCTGC TACTTAATAT CCATATTGGT TTGAGTTATT TAACCTTGAC AATCCACACT GTAAATGGG  
TAAATAATA ATACCTCTC CTCAGAAGTG TTACAAAGT TATATGAAAT AATGTGCTTA AAAAGCTGGG TACATAGTAG  
GAGCTTAGTC ATTGTTTATT TTCTCCTCA TACCCATACA TGNITCATTC CTA CTG

SEQ ID NO:256: (Length of Sequence = 241 Nucleotides)

GTAGAGATGG GCTCACTATK TTGCCAGGC TGGTCTGAA CTCCTGAGGT AGGAGGATCG CTTGAGCCTG GGAGACAGAG  
GTGCACTGA GCGAGATCA CGCCACTGCA CTCCTGCCTG GGTGACACAG TGAGACTCTG TCTTAAACAA AACAAAACAA  
AAAAAGGCCA GCGCAGGGG CTCACACCTG GTAATCCAG CACTTTGGGA GGCCAAGGTG GGTGGATCAC CTGAGGTCAG  
G

SEQ ID NO:257: (Length of Sequence = 406 Nucleotides)

CAAGGGTGT CTTGCCAGA TCACTGTAA TGATTGCTT GTGGGAGCT CGTGGGATG GCCTCTGCGG CTGGTCTGAT  
TAAGAAAACC AAGAGAGGCC GGGCAGGTG ACTCAGCCT GTAATCCAG CACTTTGGGA GGCCGAGGTG GCGGATCATG  
AGGTCAAGAG ATTGAGACCA TCTGGCTAA CACAGTGAA CCCGCTCTCT ACTAAAAATA CAAAAAATT AGCTGGGCAT  
GGTGGCAGC GATTGTAGTC CCAGCTACTA GAGAGGCTAA GGCAGGTGAA TCGCTTGAAT CCAGGAGGTG GGGGTTTCAA  
TGAGCCGAG ATCGTACCAC TGCACTCCAG CCTGGGGCAA CAGAGTANGA CTTGTAAAC CCAACCAAC CNCCAACCC  
CCCGCC

SEQ ID NO:258: (Length of Sequence = 157 Nucleotides)

GAAAAGAAGG AAGGAAAGAG GGGAGGGAGG GAGGAAAGGA GAGAGGGAGG GAAAGAAGGA GAAAATGCTG GAGCAAAGGA  
GGTGGTTAC ATGATTTCTC TAATGGCAAT GAGCTGCTTT CTGGATGAAA TACAGAATCA GAGCGAGACT CCGTCTC

SEQ ID NO:259: (Length of Sequence = 361 Nucleotides)

AAGCAGATAT AAATGGGACC ACTGTGAATC AAAGGGGAAA AATTCCAGGA AAAAAAATT CCAATAGCTT CACAGTTTAA  
CTGAGGTTTT GGAAAACTT AAGTGAATTC AGCTGATGTT TGAAATATCT GTCTACATTT AATTAGATGT GTTGTATTTA  
CCAAGGAGGC ACAAATATGT AGTTCIGTAG ATTTTAATAC TAACTTTTCC AGTAAGAAAA ATAATACCAG GTGATTTCAA  
AAAGGGCAGT GATCTATAAA CACTCAAAAT GCATCTTTGA ACAGGGGAGC AGAAATAGCT AATTTAATGA AAACAAACCT  
TAAGCACTTT ACTTGGCTTC TAATAAGGCA TCCCAAGAAA A

SEQ ID NO:260: (Length of Sequence = 349 Nucleotides)

CAATACATGT ATACAGTGTA CACTGATCAA ATAAGAGTAA TTAGCATATT TATCACCTCA TTCTTTTGT GGTGAGAACA  
TTTAAATCC TTCTTTTGT CTATTTTGAA ATATACAGTA CATTGCTATT AAGTATAGTC ATCTGGCTGT GCAATAAAAC  
ACCAGNACTT ACCCTCTCTG TCTGTGACTT TGTACCTGT TCACCACCC TCCAATCTC TAGTAACCTAC CATTCTACTC  
TCTACTCTA TGAGCCTGAC TTTTAAAT TCCACATGTA AGTGAGATTA CATGGTATTA TTCTCTCTGT GGCTGGCTTA  
TTTCACTTTA ACATAATGTC CTCTAAAT

SEQ ID NO:261: (Length of Sequence = 415 Nucleotides)

GGAAGATGAG GATCTAGGTG TGAGCGTGCA GAGCCTGAG GCTGGGCAGG CAGGGAGCTC TGCTGCACA ATGATGTAGC  
CATGTGTGGC CACACCGCA CTGGGCAGCA CCTCTGGGGA GGGGGCAGG GCAAGGACAA CTGGAGAGAC AAAGCCAGAT  
GGGGCCAGT CCTTAGAGT GTGTGTGCAC GCACATGTGT GTGTGTGTGT GTGTAATACG CAGGGCAGAA ACACACCATG  
TAGGTCAGGC AGGACAGAAA CACATCATGT AGGCCAGGCG TGGTGGCTCA GGCTGTAAAT GCCAGCACTT AGGAGGCCA  
AAGTGGGCGG ATCAGCTGAG GTCAGGAGTT CGAGACCAGC CTGGCCAACA TTGCAAAACC TCATCTCTAC TAAATTTCTA  
AAATTAGCCA GCGT

SEQ ID NO:262: (Length of Sequence = 382 Nucleotides)

GGCATGGGT CTGGCTTTAA TGIGTAACTG ACGTGGGTCA CTGAACTGT TCAGGCTGAT CTGAACTCC TAGGCTCAAG  
TGATCTGCT GCCTGGCTT CCAGAGTGC TGGAAATACA GGAATGAGTC ACAGCACCA GCCGGCTGTG TTTTGTTTT  
TGTTTTTAC CCCGACAGT NCTCAGTCAG TCGTAGCTG GAGTGAAGTG GCGTAACACA GCTCACTGCA GCCTTGATCT  
CCTGGGCTCA AGTGATCCTT CCATTTCTTC CTCCAGAGT AACTGGTACT GCAGGCCAC GGCACCACAC ATGGCTAATT  
TTTAAATTC GTAGAGACGA GGCTTGCCA TGTTGCTCA GGCTCCAGCT GTTGTATTCT TT

SEQ ID NO:263: (Length of Sequence = 447 Nucleotides)

TGATCAACT CAGAAATTC AGAGAGCTCT TCCTGGCTGA AAAGATGTCC AAGGATCATC TCCGGAATGG AAGAGGTGAG  
GCCTGTAGC TTGTGGGCTG CCCAATCCAT CCAACCTTG GCATTTGGAT CAATGTGAT GAGGACAAGA CCTTCAACAG  
TGTCGGGTG GTTAAGAGCA TATCTGCCA GGATGTAGGC TCCAGCTCCA ACACCAACTC CAATTATGT AGAGAAATTT  
AGGTACTGCA GGAAGCAAGG GATCATGTCT GCAAGCTGGT CCAGAGATGG GTACTGATAT CCCAAAGGGA ACACAGGGGC  
TCCCTCTCC ATTCCAGGG CATCCATG GACCCGACA AAGTCTGAA TGATTTCTG CATGCTCTG AACTKGAACA  
GTGGCTGGAG GAAAGATTA TAGTTGAGTC CACATCGGT AGGTAAG

SEQ ID NO:264: (Length of Sequence = 317 Nucleotides)

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TTTTCGCTGT CAACAGACAG TTTATTTCTAT ATACAAACAC AATTTTGTAC ACTGCAATTA AATAGAATGG AATGAGCGCT  
 CCTCCGCATT CCTCCCGAG TGACTGGTTT GGCCGCGGC CACTCCATCC CCGAGTGGGA CTGGACCAG GCCCTGNTG  
 CTGCCACTGA TGTGNGCC TGCACCCAC GTCCCTATGC CCGAGGCGCA ANTCGTCTT CCCGGGACC CCAAGNCTGG  
 NGCACACCG GGGAGGGCG GGCATGGAG AAGGCACTGC AGGGAGCACC AGGCAGAGCC GTGTTGAGGC CGGCCGG

SEQ ID NO:265: (Length of Sequence = 270 Nucleotides)

GCAGAGCAGG TGAAGTGAT CAGGAACCAT AGTTGACAGT TCCAATCAGT AGCTTAAGAA AAAACCGTGT TTGTCTCTTC  
 TGAATGGTT AGAAGTGAGG GAGTTTGGCC CGTTCTGTTT GTAGAGTCTC ATAGTTGGAC TTCTAGCAT ATATGTGTCC  
 ATTTCTTAT GCTGTAAAG CAAGTCTGC AACCAAACTC CCATCAGCCC AATCCCTGAT CCTGATCCC TTCCACCTGC  
 TCTGCTGATG ACCCCCCCAG CTTCACTTCT

SEQ ID NO:266: (Length of Sequence = 297 Nucleotides)

ATGAGGCGAG GCTTCGAAG TGGCTGGCAT GCAGCAGGTG CTAATGAGTG TTGCAAAGGT GATGTCACGC AGGCAGCTTC  
 CCGTGGCCAG AGAAACATTG CAGAGAAGGG ATAAGTAGGG CTTAGTGAAT TTGACGGGTC AATGGAAGAA TGACCCAAAG  
 AAGGCTTCAA GGCCAGGCTT GCAGTTCTCC ACCACAAAGG CCTCACTGA TAGCACCAC TCCCCACAC TCAGCTTING  
 GGCTAGGTC TGGTCAACC AGCTAGAAGC CACAGGACCC TGAGGCTCC GAGGGT

SEQ ID NO:267: (Length of Sequence = 387 Nucleotides)

CTGTGTTTCA TCATGAGTTC GATCAGATGT CTCTGATCT TCAGACTGGT GGTGTCTAT AATGTCTGT GCACGCATTC  
 TTGAGCTTC CAGGATTTCT GTCTGTTCTC TCTGTTTATC TACAGAAGAA ACTTTCTCTT TGAGTTCTG TTCTGTGAG  
 CGCCTGAAC TCCTTTCTT TTCTGTTTCA CGATCTCTCT CTTTCCATCT ACCCTGTCTG TCTCTGTGA GGTGCGAGGG  
 ACTAAGAGAA CGAGATTTCT GAGGTCTGAC AACTTGGCTC AAGAGTCTGT GTTTTTCAT TTTTATCAT CTCCACTGTT  
 GTAGGCATCA CTGTCCGAG AATGTTCAAG CCGGCGCTTT CGGGGACTG TCTAGGCTG GCACTCC

SEQ ID NO:268: (Length of Sequence = 318 Nucleotides)

CCTGAAGGTT ACCTCTTTGG AGAGAACATG GATCTGAATC TCCTGGGCAG CGCCCGGTC CAGTTTCCCT ACGTCACTCC  
 TGCCCCCAC GAGCCCGTGA AGACGCTGG GAGCTGGTGA ACATCCGCA AGACTCCCTG CGGCTGGTGA GGTACAAAGA  
 CGATCCGAC AGCCCCACCG AGGACGGCGA CAAGCCCGG GTGCTCTACA GCCTGGAGTT CACCTTCGAC GCGATGCC  
 GCGTGGCCAT CACCATCTAC TTCCAGGCAT CGGAGGAGTT CCGAACGGC AGGGCAGTAT ACAGCCCCAA GAGCCCT

SEQ ID NO:269: (Length of Sequence = 422 Nucleotides)

ACATGCTTAT TCAGGTCTTT TGCCATTTT GAAATAGCAT TGCTGTCTT TTTGCTGGAT ATTAAACCCCT TGTAGGTGC  
 ACAGTTTGA AGTTACCTTT TCTATCTTA TAGGTTATCT CCTACTCTT GATTGTTCT GTTGTGTGC AGTAGCTTTT  
 AAGTTGGTG TAATACCAT GTGTTTCTC TGCTGCCCT TTAAGTTTCA CTGGGTCAA AGTTTAAAT TTGTGAATTC  
 CTATATTTT AGGGCAATTC TCCTGCCACT GTTGAATTA TGCTCAATC TATGCAGTAG AATATTAGTG TGAAATGCTT  
 CTGTACCAAT GGAGATGATG CTGGATGGT TCTATCATAA ACCCATACCT CATCAACACA AACTGCAATT ACACAAGGGC  
 TCTATATCAT GGATCTCCAT TT

SEQ ID NO:270: (Length of Sequence = 376 Nucleotides)

GAAGAAGAGC CCAGACCTAG GGGAGTATGA TCACTTACC CAGGCTGAC TGGAGAGAG CGAAGACGAT CTGGTGCTTA  
 ACCTGCAGAA GAATGGAGGG GTCAAAATG GGAAGAGTCC TTTGGGAGAA GCGCCAGAAC CCGACTCAGA TCTGAGGTT  
 GCAGAGGCTG CAAAGCACAT CTTTCAGAAG TCACCACGGA GGGCTACCCC TCAGAACCCC TTNGGGGCTT GGAACAGAAG

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GCGGCCCTCCT CCTGGTGTG ATATGTGCGC ACGTCTGTCT TCCTGCTTGA CTTTGGGGAT CTCGATGATC CTGGTGCTCC  
TGTTGTGCTTT CCTGATCCCC TGTCCTCCCA GAGATCTTGA CAGAACTGGA GCGCA

SEQ ID NO:271: (Length of Sequence = 346 Nucleotides)

TGTTACAGTT CCTTTCTTT GTCTTCTTT TTCTATCTT TATCTATACT TCGACTCTC TCCTTTTTC TCTCTTGTC  
TTTAGCCTCA CCTTTATGCT TATGACTGTA CCCACTAAGA TTTCACGTT GATCATCAAT TTTACGNTA TCTGACTCC  
TACTGCGACT GGCACGATTG GTTCGTCTAT CCTTGAGCG ACTTCTACGA ATGCTTATGA AAAAGAATCA AGTTGNCAC  
CAAATGTTT ATAGCAGTAG GAAATTTCTT TTAGAGACTT CTGATGGGAA ATTTGAAGTG TATGTTGCTA TCAGATCAAG  
TGCAGGAGAG GTATAAGGCT ACTGGA

SEQ ID NO:272: (Length of Sequence = 394 Nucleotides)

GTGTGTGTG TTGAGTCGA GTCTGCACT GTTGCTGGG CTGGAGTGCA ATGGTGCAAT CTCGGCTCAC TGTAACCTCC  
GCTCCAGG TTCAAGCCAT TCTCTGCTT CAGCTCCTA GTAGCTGGGA TTACAGGCAC CTGCCAGCAC ACCTGGCTAA  
TTTTTATAT TTNAGTACA GACAGGGTTT CACTATGTTG GCCAGGCTGG NCTTGAATC CTGACCTGT GATCTGCCA  
CCTCAGCTT CCAAAGTTT TCAGAAATTT TTAAGGAAAC ACTTTTAACC CTTAAGGCTT TCTTTCAAC TCAGATCCCC  
TTACACAATT GATCAGAGT GCAAAGTTT TGCTTCAAAG TTTTGGACT GGGTTCCAC TTTAGGCTTA CTGA

SEQ ID NO:273: (Length of Sequence = 259 Nucleotides)

CAACCTGTAC CCAGGCTGCG AGAACGTRAG TTTRAGGAGC CGCAGCATGA TGTTGAGCC GGGTCTTACC AAAGGRATGC  
TGGAGGTGTT TKTGGCCCG ACCCACCACC CGCACTGCTC GGCAGATGAC CAGTCCACCA AGGSCATCGA CATCCAGAAC  
GCTTATTTRA ATGGAGTTGG CGATTTGAGC GTTGGGAGT TCTCTGGAA TCCTGTGTAT TCTGCTGTW ATRACTATTT  
TGCTGCAAAT AATCCACG

SEQ ID NO:274: (Length of Sequence = 348 Nucleotides)

TCCAGTTGT CCGATTGTA ACTCAAAGG TGAATATCA AGGTGTTTT TTTCATTCCA TGTCGCCAGT TAATCTTGCT  
TTCTTGTGTT GGCTGGGATA GAGGGGTCAA GTTATTAATT TCTTCACACC TACCTCCTT TTTTCCCTA TCACTGAAGC  
TTTTTAGTGC ATTAGTGGG AGGAGGGTGG GGAGACATAA CCACTGCTTC CATTTAATGG GGTGCACCTG TCCAATAGGC  
GTAGTATCCG GACAGAGCAC GTTTGCAGAA GGGGACTCT TCTTCAGGT AGCTGAAAGG GGAAGACCT GACGTACTCT  
GGGTAGGTT AGGACTTGCC CTCGTGGT

SEQ ID NO:275: (Length of Sequence = 396 Nucleotides)

GTITGGTGAA TTTGGTCTGT GATAAAATG GAGTCAAGA AACAAACAGG AAACATAAG TGCCCTTCG CCCCCAGTC  
ACCGAGTGG CAGGGCAGTG ACCGCTGCTC TCAGGCTGCC CAGTGTGGAC CTGCTGTG GAATGCTCCT CTTCCAGTC  
CCTCGCTCC TGTTGCCAG CCACATGCAC CTTCCCTCTA CTTCTGGGAT CCTGCACCA GGCTGCCCC TGCTTCTCA  
GGGCTGCTCC TMTGNNCCA CAGGACTCA GCTGGAATGT TGCTCTCTC AAGAGGCTT CTGACTATT CAGCTCACAG  
TGGCCACCA GCCACAATCT GCCATGTGCT TTGGGGGATT GTCTGTAAAC TGGCAACATA CTGGCAGCCC ATAAC

SEQ ID NO:276: (Length of Sequence = 381 Nucleotides)

GGTGTGGGG AGGCTGCGCA AGGGGGGAG CCGGGCAGC CGGCGCAACC CCGNCCAG CGCACCCAC CGCGCCCCA  
GCAGCAGCAC AAGGAAGAGA TGGCGGCCGA GGCTGGGAA GCGTGGCGT CCCCCATGGA CGACGGGTT NTGAGCCTGC  
ACTGCGCTC CTATGTCTG TACAGGGACA GAGCAGAATG GGCTGATATA GATCGGTGC CGCAGAATGA TGGCCCCAAT



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CCCGTGGTCC AGATCAITTA TAGTGACAAA TTTTAGAGAT GTTTATGATT ACTTCCGAGC TGGTCCTGCA GCGTTGATGA  
AAGAAGTGAA CGAGCTTTTA AGTTAACCCG GGATTGCTAT TNAGTTAAAT GCAAGCCAAT T

SEQ ID NO:277: (Length of Sequence = 206 Nucleotides)

TTAATACGAC AGGGCTGGCG CCGAGTAAT TCAAGCCCTT CGGAAGTGTG ACCGGCTGCC AGGCCTGGGA TGCAATCCTG  
GAGGCGGGAG ATTGGGCTIN AAGACTGGCT CGAGCGGCC AGGGGCTCCA TGGGAGACTA ACGGGGAAGT YCCAGCCGTC  
CCAGTGCCGT GACGTCCCC CTGGTGGGG CTGCACCCG ACTACT

SEQ ID NO:278: (Length of Sequence = 260 Nucleotides)

ACCTGTAATC CCGCACITTT GGGAGGCTGA GGTGGGCAGA TCAAGAGGTC AGGAGATAGA GACCATCCTG GCTAACACGG  
TGAAACCCCA TCTCTACTAG AAAAATACAA AAAATTAGCC GGGCATGGTG GCGGGCGCCT GTAGTCCCAG CTACTCGGGA  
GGCTGAGGCA GGAGAATGGC GGGAACCCGG GAGGCGGANT TGCAGTGAGC TGAGATGCGC CCGTCTCTCC AGCCTGGGCA  
ATAGAGTGGG ACTCCATCTC

SEQ ID NO:279: (Length of Sequence = 308 Nucleotides)

GTGTCGGGC TCAGGGTTGG CCAGCTTGCA GAGGAGCAAG CTAGTAGAAA TATTGCAGGG TTCCCAAAC CAGGTCAAGC  
AAGATGCCAT GTCACCCCTG AGCATGCTG TCTTCCCAAG GGTGTACCTC TTGGCTGGCA AAGCCAAGGC CAGTGGGNAC  
TTGTATAAAT CACATGGGTA TGTTCTTGGT TCAGTGATCT TGGAGTGATG ATGGTAACTN ATGAACAGAG AACTTTYYAG  
AACTTKGGTC CTGTCTTCT CCGTGAACCT AGACAAGTTT CACCCCTCCT CCTGTACCCA ACCCCATT

SEQ ID NO:280: (Length of Sequence = 402 Nucleotides)

ATTTTAGCAG CTTTCTTGAA ATTTAAATA TATGTGTAG TATCTCATTT ATATGCATTT CTAGTTTCTT TATACAACAG  
AATAACTTCT TTTACATCAA ATTTCTGAAT TTAGCTAAAT TTAGAAATAA TGGAACTCA TCCATTAAAT ATAGTCATAG  
AAGGAAGGAA ATATGAAAAT TAGGATTICA GATGTTTGAA CATAAAGAT AATTTTAAAC ATTGTACAGTA ATCTATTCT  
TTTTTTTTTC GAGACGGAGT TTGCTCTGT CACCCAGGCT GGAGTGCACT GGCGCGGTCT TGGCTTACTG CACCCCTGTC  
CTCCAGTTC AAGTGGATTC TCCTGCTG NOCTCTGAG TAGCTGGGGT TACAGGGGCA TGCCAACATG CCGGGGCTAA  
TT

SEQ ID NO:281: (Length of Sequence = 313 Nucleotides)

GAGAATCCGT CTTAAAAAGA AAAAAGAAA ATTATAGAGG GAGATGAGGT GGGACAGAGT CTGGCAGTTC ATCAGGGGGA  
CTGAGAAGGT GGCAATTGGA GGAGAGGAGG CAGTGAGCTG TGCAGTGTC AGGCAGCCAC CCTTCCCAGC GGCCACCATG  
ACGGTGTCTT CATTGCTTTA ACCATTAGTA ATCAITTCATT CAITTCATTCA TTTATCCGAC GTCAGCTGGA GGNCTGCCC  
GNGGGGCATG CGCTTAGATT TNGGAGCCT TCGGGATGC TTGCGCTCA ACGGGGAAG GCGACTTGG GCT

SEQ ID NO:282: (Length of Sequence = 217 Nucleotides)

TGACCTCAGT TGATCCACCC ACCTTGGCCT CCCAAAGTGC TAGTATTATG GGCGTGAACC ACCATGNCCA GCGAAAAGC  
TTTIGAGGGG CTGACTTCAA ATCCATGTAG GGAAGTAAAA TGGANGGAAA TTGGGGTGCA TTTTCTAAGG ACCTTTCTAA  
CANATGGCTA TAAINTAAGG GGTTTAGGGT CCTTTTTTTT TTTCAGGGA TACATTT

SEQ ID NO:283: (Length of Sequence = 327 Nucleotides)

TAGAGAGGCG TTTACTCCTG GTCCCATGGC GTAAAGATGT GGCTGGGCTT GACAAGGCTC AGCCTCCAGT CTTAAGATGG  
GCACAGAAGG GCAAGAAGTA AGATGACGAG TCCAGAATT AGGACAAGCC ATGAGCCAAG GCCTGGTCTG AGCAAGGGCA

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GCCCCCTGTC CCAGACACAG GCACCCCCAA TCTCACTTTG GACAGAGCCA ACGTGGGGGG ATCCTCCCGG GCCTGGGCGT  
 GTCAAGTCTG CCGCAGGAC CCGCCATTG TGCTCAAATC ACAACCAATT TTTGCTTCCA ACATTTTAGG GTGCTTGTC  
 AGTGAGT

SEQ ID NO:284: (Length of Sequence = 340 Nucleotides)

CTTTGGAAAT GTAAATTGTT ACAAACCTTAC TTTAGAGCAA ATTTAGTCAT CCTTCAAAAA TTAAATGTA TACTTATTTT  
 CTAAGAATTC GTTTGGCTCA CACAATTGTG AAAAGATAGA TGACACCAG TGTTCATTAC AACAAATTATG CAACAAATCT  
 ATTATGTGCC AGACATTATT CGGAACCTG GGAATACATA AGTGAACAAA GCAGATTCCT GATCTCAGGA CCTGGGGTCA  
 GGGGTCAGGA GAAGCCAAA AACACGCTNG AGAAATACTT TATGCAGTGT GGGGGGAGTG CTACCAGCAG AGCAGGGGAT  
 GGGATGTGA AATCTTGTT

SEQ ID NO:285: (Length of Sequence = 335 Nucleotides)

GACATTCAG GAGGTGGGTT CGACCTCGG TCCCCCACC ATGACAATGA GCTGGCACAG TCGGAGGCGT ACTTTGAAAA  
 CGACTGCTGG GTCAGTACT TCCTGCACAC AGGCCACCTG ACCATTGCAG GCTGCAAAAT GTCAAAGTCA CTAAAAACT  
 TCATACCAT TAAAGATGCC TTGAAAAAGC ACTCAGCAG GCAGTTGCGG CTGGCCTTCC TCATGCACTC GTGGAAGGAC  
 ACCTGGACT ACTCCAGCAA CACCATGGAG TCAGCGCTT AATATGAGAA GTTCTTGAAT GAGTTTCTT TAAATGTGA  
 AAGATATCCT TCGCG

SEQ ID NO:286: (Length of Sequence = 399 Nucleotides)

GCACAATTAT TAAAAAGAGG CCACTTAAAT TCAACTCTCC ATGGATACAG TGTCTGTGGC AATGTTAAT TAGAGATTAA  
 AATTGAGGAA TTGAATAATT GAGGTGCTA ATGAATTGA AACTCAGCA AAGCAAGGAG AGCTGAGCGT TTTCCGACT  
 TAGCTTTTCT TTCTTAACC CTTTCTCAT TTCTACTAT TATCATTNT CTGGCCTTGA CTGCTGAGTT TATTACTACC  
 CATAACCTG GCCTAAGTGG AAACAAAAA GCTGTAGCCT CTTTGCTGAG CTCCTGGAGA CATTTGGTCT ATTGGATTTA  
 TGACATGTC AGAAGCTTGC AGTTGCAGGA GGCTGACAAT GATGAAAATG AGATATGNTG GGCCACCAG CTTTCTGT

SEQ ID NO:287: (Length of Sequence = 294 Nucleotides)

TTCCAGTTGA ATTACCACT GGACAAAATG AGGAAACAG GTGAACAAGC TTTTCTGTA TTTACATACA AAGTCAGATC  
 AGTTATGGGA CAATAGTATT GAATAGATTT CAGCTTTATG CTGGAGTAAC TGGCATGTA GCAACTGTG TTGGCGTGGG  
 GGTGGAGGGG TGAGGTGGGC GCTAAGCTTT TTTAAGATT TTNCAGGTAC CCCTCACTAA AGGCACCGAA GCTTAAAGTA  
 GGACAACCAT GGAGCCTTCC TGTGGCAGGA GAGACAACAA AGCGCTATTA TCCT

SEQ ID NO:288: (Length of Sequence = 391 Nucleotides)

TCTACAGATG AGGAAAGCAA GCCTCAAGCA AGGGGGGCGT GATCCTTCC CTGTTCCCTG TGTATTCCTT GTCTGTGGCA  
 AAGCCCATG CTTGATTCT CTTCTCTTA CTTTCATGTT GAGAAGTAGT TTTCTTCTGC AGTTTATTTA ATTTACTGGC  
 AAAATGACGT ATTTTCTTT CAGCAATGTT TCAGCTAGAT ATTTGCTTTA TGCAATGAAT GTCAATGAAG TACTCATAAG  
 TTTTCAAGAA ATGACTGATA TAAATCATGT GTTCCACTAC ATAGTCTAAA TATTTAGTAT TTGGTCATCT ATTTTAATAT  
 GTTCAAAATC TGTTAAACAA GNCATAGTCA CTATGTGAAG ATAAAAATAG NCAAGGTGCT ATTATGACTT T

SEQ ID NO:289: (Length of Sequence = 198 Nucleotides)

CTTATATTCT ACTTTATTG GTAAACTCA GAACTAACA ATTCACATCC TCCCACCTTC TTCTTCCGA AGAAGGAGT  
 TTGCAGAGAC AAAAGGGCTG TGGCGTGGG ATCATCCACC ATCTCCAGGT TTTACACCCA GGCTACCCAT GGCTTGGCAG  
 TCAAGCCTCT AAGCTGATTG CTCTCAGAGG CAATAGAA

SEQ ID NO:290: (Length of Sequence = 353 Nucleotides)

GGTTTTCATC TTGGGTTTAC AAAAGTCCTA CTATTATTTT ATTTTAACTT TAATTTAAAT ATCACCTACC TTAGGTAGAA  
GTTTTCCITT GGTAAATATA ATATAAAACC GACATTTCTT GGGGGCATAA TAGTAAAGAT GTTAACATTT TTTGGTTCTT  
TTTGGATGCT GTATTGTGTC TTCTTCGAA AGTGATGIGT GCCAAGATGG CTCATGTAAC CCAGTTTTGA CTAGGCTATT  
GATATTCIGT CTGGTTAATT TATTGAACTG GCTTAAAGCT ATACATATTT CCTTTTAGNTGTAA GATATTCIAG  
ATATATTGGT CTACTGATTC ATAATATCAC TGG

SEQ ID NO:291: (Length of Sequence = 163 Nucleotides)

CCGTGTAGGC CTGCTACACA GTCTGCAAC GNCCTCGTG CTGGGCTTC TCGGTGAGG CAGGGGAGTC TGCTGTCTT  
AGATGTTGGT GGTGAGTCC CAGGACCAAG CTTAAGGAGA GGAGAGCATC TGCTCTGAGA CGGATGGAAG GAGAGAGGTT  
GAG

SEQ ID NO:292: (Length of Sequence = 397 Nucleotides)

ACGGGAAGGT GAGTATGTNA GTATGINTGC CAGACAATGG TGTTTCCATG TCAATGGAGG TTCTCAGAG AGAGGTGATC  
TGGCTGGAGA AAGCTTAATC TGGTGGCAAT GGACAGGTGA CTTTAAGAAG TGGGGAACGA GGAAGGAGG CCAGTTTGAA  
AATNATAACA AGGGTCCAGA CTCAGTGATG CAGCAGTGAC CATGAGAACA GAGCAGCTGC AGGTAGAAGA TGGAGACAGA  
ACTNGGGAGA TCTGGTGGAG GTAAGCCGCG TGGAAAGATG ATGTCAGGTT TATACCTAGA GGACACATGA TCCATTACAA  
AAGCCAGGGG NAACCTAAG AGAAACACT TAGAATTTTN GGAGAAAGG CTAGGGCTGG GCCTTAGACA TGGGCTG

SEQ ID NO:293: (Length of Sequence = 360 Nucleotides)

GAGGTAAAT TTACATACAG TGAAATCCAA ATCTTAAGTG TACCACTAGA TAAATTTTGA TAAATGCATT ATGCCTGGTC  
TTCACACACC CTTTTCATA TATAGAAAAT NTCCAGATAA TTTATTTTGT TGTTTTTTTC ACACACTAAG TTCTAGACTT  
TTCCAGGTCC GAGGGAACATA TTAGGGGGGA AAGTACTTGT NATAGTAAAA AAGATTTTAG GTGTGTTTGT TTTTAAGGTG  
CAGAAACACA TCGCAGATTT AAGGTCTGCA ATCTCTGCTT TTTGTTATTG TTCCAGTTTT GATCTCAGTG ACATTACAAG  
CAAGCAGAAA CACTCAGACA TGAAATGGCC CAG

SEQ ID NO:294: (Length of Sequence = 321 Nucleotides)

TTTTTTTCAG GNTTCAACCG TTTTATGGG AGGTTTGTGTT TTCTGTGAAA TACACTAGAG GGTGGGGAAG GGGACACATT  
CACTTTGCAA GATAAGGGTT TCCCACTT AAAGGAAAGG CATGGGCGAG GGCACACTGG GGTGTTGGGTC CGTTTTCCCA  
CCTCCTCTG CTGGGCTCAC TTTCTTTTC TCTCAGCAAG TACCACAGAA CACAAAGACA AGAAACAAAA CAGCAAATCA  
ACCTCCAAGG GGGCCATGCC AAGCCTTCCC CACTCCCCCA GGCTGGGCAA GGGCTGGGAG GGGGCTGGGG CAGCTCACTC  
G

SEQ ID NO:295: (Length of Sequence = 165 Nucleotides)

GACACACAGC GCTTCGGCC COGCACAGG GGCATGTCCA GAGGTGCTGT GTGTACCAA CTGGTCTTCT AATTGGAAG  
GAGTTGGAAA GGCTTTTTTG TTGATGAAAA GTTGGAACA GTGGCATA TCINAGAGG AGGAACGAGG CAGGTGGTG  
AAGCG

SEQ ID NO:296: (Length of Sequence = 315 Nucleotides)

GAATACAGG TAGTGCCAG CTGGTTGGG TGGCCAGGA AAATNCTGCT GTGTCAAATA CTGCTGGCCA GGATGAAGCC  
ACAGCTAAGG CTGTGTTGGA GCCCATTCAG AGCACCAGTC TAATTGGGAC TTAAACCAGG ACATCTGACA GTGAGGTTCC

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AGATGTGGAA TCTCGTGAAG ACTTAATTAA AAATCACTAC ATGGCAAGNA TAGTGGAACT TACGTCTCAG TTGCAGCTGG  
CTGACAGTAA GTCAGTGCAT TTTTATGCCG AGTGCCGAGC ACTGTCTAAA AGACTNGCCT TGGCTGNAAA GTCTA

SEQ ID NO:297: (Length of Sequence = 244 Nucleotides)

AGTACGGTIN NCGCTNAAGC TTGATNATCG RATTGCCAAT CINCATAITTT GTGTAGAAT CATTGTITTT TGIGTCTTCA  
TGTTTCTATA AGATAGGACC AATATTCTTT ATTGGGCTTT GATTTTATTT TGTAACCTAA ATGTATTAAG GCAATAAATG  
TAATTTTCCA CTNAAACTA TCATTATAGA TTGGTTACT ACCTACTGCT CAGCAATTTT TTTTCTTATC AAAATTCTTC  
CTGG

SEQ ID NO:298: (Length of Sequence = 152 Nucleotides)

CCTGAACAGG TAATGAGAAA AATTACACA CAAGTGATTT TGAAAACAGA ATGGGTTGCT TACAAATTAC AGGAAATGTT  
ATAACACAAA CCAGAAGAAT TCAATGGAAG GCAATAAGGGAAT GAAAATTATA AAAGTATCAN GA

SEQ ID NO:299: (Length of Sequence = 374 Nucleotides)

CGATGTTTTT AATGTCATCA CACGTTGTCT CAAAATGAGT GGTTGGCATCA TATGTGCGGG AAATAAAGAT CTGGCTTTCT  
GTTCCTCAAGT CTTTGGTAC CAGGAGGTCA CTGATGCTAA CAAATTTCTG TTCAATTGGT TCCAAGAGCT CCAAAGCTGG  
TCTGATTTCC TTCTCAGGCT CCTTGGTTTC CACAGTTGTA CTAACATATAG CAATGTACTT CCCTTGTGCT GCTACATGT  
GGCAAAGGA GATCATGCAG ACGTAGATAT CTGACTTTG ATTGACTTTG GTTCTGTGGA ATAATGATCT GGCAGGAGTT  
GGCATCATG GTGTCTTTG ATGGGGGTGG CTGAGGGATG CAAATAACCT CTTG

SEQ ID NO:300: (Length of Sequence = 365 Nucleotides)

GGCTCACCAA GCTCAGCAAG TACGTGTACT TCTTCGAGGC CTGCCGGCTG CTGCAGAAGA TGATTGACAT CTCCCTGGAT  
GGCTTCCTGC TGACTCCGGT GCAGAAGATC TGCAAGTACC CTCTGCAGCT GGCCGAGCTG CTCAAATACA GGCACCCCCA  
GCACAGGGAC TTCAAGGATG TTGAAGCCGC CTGTGATGCC ATGAAGAAGC TGGCCAGCT CATCAACGAG CGGAAGGGTA  
GACTTGAGAA CATCGACAAG ATTGCTCAGT GGCAGAGCTC CATAGAGGAC TGGGAGGGAG AAGGATCTCT TGATCAGGAG  
CTCAGAACTC ATCTACTCGG GGGGAGCTGA CCTCGGGTTA CACAG

SEQ ID NO:301: (Length of Sequence = 224 Nucleotides)

GGTATTCAA CAAATAGCCT GAGAAITTING GGGGGATCTG AAATAGAGTA CTATGCTATG TTGGCTAAAA CTGGTGTCCA  
TCACTACAGT GGCAATANTA TTGAAGTGGG CACAGCATGC GGAAATACT ACAGAGTGTG CACTCTGGCT ATCATTGATC  
CAGGTGACTC TGACATCATT AGAAGCATGC CAGANCAGAC TGGTGAAAAG TAAACCTTTT CACG

SEQ ID NO:302: (Length of Sequence = 363 Nucleotides)

AGTTTCATC TTGTTGCCA GGCTGGAGTG CAATGGCGTG ATCTCGGCTC ASTGCAATCK GCACCTTCOG GKTTCAGCG  
ATTCTCCTGC CTCAGCTCC CAAGTAGTTG GGATTACAGG CATGCGCCAC CATGCCCGC CAATTTTKTA TTTTCTGTAC  
ACACAGGGTT TCTCCATGTT GGTGAGGCTG GTCTCAAACCT CCAACCTCG GTGATCCGTC CACCTCGGCC TCTCAAAGTG  
CTGGGATTAT AGGCATGAGC CACTGTGTCC GGCCAGCTCA AACAATTTTA ATGCTTCTTT CAAGNCTATT AGAAACCTTT  
AATGCTTCT TAAGTTTCTC CCCCAACTAT GGAGGAAGCA TAT

SEQ ID NO:303: (Length of Sequence = 253 Nucleotides)

ATGCAGGAAS ATCTACCARG CAAATCGAAA ACAAAAAAG GCAGGGGTTG CAATCCATCT CTCTGATAAA ACAGACTTTA  
AACCAACAAR RRTCAAAGA CACAGAGARG GCCATARCAT AATAGTAAAG CGGATCAATT CAACAAGAAG AGCTAACTAT

CCTAAATATA TATGCACCCA ATACAGGAGC AACTAGATTG ATAAAGCAAG TCCTGGAGGT GCCTACAGAG GAGGCTTAGG  
CTOCCACACA TTA

SEQ ID NO:304: (Length of Sequence = 416 Nucleotides)

TTTTTTGAG ATGGAGTACT CGCTCTCTTG CCGGGCTGG AGTGCACTGG CGGATCTGG GCTCACCCTGC AACCCCTGCC  
TCCCAGTTC AAGAGGTTCT CTGCCTCAG CTTCCCGGT GGCTGGAATT GCAGGCACAC ACCACCATGC CCAGCTGCTT  
TCTGTATTT TTAGTGGAGA CGTGGTTTCA CCATGTTGGC CAGGCTGGTC TTGAGCTCCT GACCTTAAGT GATCCGCCAG  
CCTTGGCCTC CCAAAGTGCT GGGATTACAG GCGTGAGCAC CGTGCCAGG CTGTTTTTTA ACTGACTTTG GATTTTACTC  
CCTTCTATG CAAATTTAT TTAGAATCTG TTCCTTAACC TTAGGGGGTT GGGTTAGACA AGTTTCAAGG GAGCCTCAAG  
TGKAAATGTC TTAAGG

SEQ ID NO:305: (Length of Sequence = 223 Nucleotides)

CACACCCAGC TAATTTTTGT ATTTTATAGT GAGACGGGT TTCACCATGT TGGCTTGGCT GGTCAOGAAC TCCTGGCCTT  
GAGTATCCC CTGCCTCAG CTTCCAAAG TGCTGGGATT ACAGGTGTGA GTGAGGTGC CCAGCCAGA TTTTATGTT  
TTAATTACAA ATTTTACGTT AACTGATTCT GCACATTTAT ATTTGCACAC TTGTGCTAGT GAG

SEQ ID NO:306: (Length of Sequence = 169 Nucleotides)

GTTTGGCAC ATGGCCAGG CTGGTCTGA ACTCCGACC VVGIGAGCCA CTGCCTTGG CCTCTCAAAG TGCTGGGATT  
ACAGGCGTGA GCACCAAGCC CGACCCATAG CTCCTTACAA CTGCCTTGTG AAGAAAGCAT CATTGGGCAC TGTTAGTATT  
TCCTTGAA

SEQ ID NO:307: (Length of Sequence = 303 Nucleotides)

GATTTGGTAC AGAGTATGTC AGGAAGACAA CTCAGATTGC CATTTTAAAT AAAGTTGTAC ATGAACAATA ATTGGAATCA  
TCAGGTAATT TTTTAAACA AAGGTTCTTC ATTTACTGTT ATGATTGGAA AAAAAATTAG AAAATAAAGT AAGTSCCATA  
GGCTAATTAA AAAATAAAC CTGGCCGGG CGGGTGGCT TACGCCATA ATCCAGCAC TTGGGGAGGC CGAGACGGGC  
AGATCAAGNG GTCAGGAGAT TGAGACCATC CTGGCTAACA CGGTGAAACC CCATCTGTAC TTG

SEQ ID NO:308: (Length of Sequence = 143 Nucleotides)

ATCTAGGAGG CTGAGGTGGG ATCGCCCCAG TACTGGAGGT CAGGGCTGCA GTCAGCCATG ATCATGCCAC TACACTCCAK  
CCTGGGTGAC AAGGTGAGAC CCTCTSTCAA AAAACCTCAG TCAATVCAA CATACAGTAT ATT

SEQ ID NO:309: (Length of Sequence = 199 Nucleotides)

CCACCCCTCA TAANCCOCAC TGGGGAGTCT GGGGGCTCT ATTGCCATGT GCTGGAATN ATNATATGCT CATCACTTTA  
TGAAGAATAA AATTGINTT TCCTGCCTTA AAGTTACATT CGTCTTCCG CTCAAATCCT GATCTGGTCC ATTAAAGAGT  
GTTGCGAGAC AAAGTTTCTG AAAGATTAGA GAAGAATCC

SEQ ID NO:310: (Length of Sequence = 426 Nucleotides)

TCCTGTACC ACCTCTTCT GAATACGGAG GAAAAGTTG TTAGGACTG ATCCCTGAGG AATCTTCCA GTTCTTTAT  
CCTAAAACG GTGTAAACAG ACCCTATGTA CTGGAACTG GCTTATCTT GTACGCTTTA TCCAAAGAAA TATATGTGAT  
TAGCGCAGAG ACCTTCACTG CCCTATCAGT ACTAGGTGTA ATGGTCTATG GAATTAATAA ATATGGTCCC TTGTGTGCAG  
ACTTTGCTGA TAACTCAAT GAGCAAAAAC TTGCCAACT AGAAGAGGCG AAGAAGTTCT TCCATCCAAC ACATCCAGAA

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TGCAATTGGA TACGGAGAAG GTCACAACAG GCACTGGTTT CCAGGAAGCG CCATTTACCG TTTTMTATGG GMCAAAGGGA  
GTTACATTGG CTATGGCTTT TGAAG

SEQ ID NO:311: (Length of Sequence = 489 Nucleotides)

TGACTCGGT CTTGGATGTG GTGAGGAAGG AGTCAGAGAG CTGTGACTGT TTCCAGGGCT TCCAGCTGAC CCACTCTCTG  
GGGGGCGGCA CGGGGTCCGG GATGGGCACC CTGCTCATCA GCAAGATCCG GGAAGAGTAC CCAGACCGCA TCATGAACAC  
CTTCAGCGTC ATGCCCTCAC CCAAGGTGTC AGACACGGTR GTGGAGCCCT ACAACGCCAC CTTMTCCGTC CACCAGCTGG  
TGGAAAACAC AGATGAAACC TACTGCATTG ACAACGAGGC CCTGTATGAC ATCTGCTTCC GCACCCCTGAA GCTGACCACC  
CCCACCTAGG GGGACCTCAA CCACCTGGTG TCGGCCACCA TGAGCGGGGT AACACCTGCT TGCGCTTYCC GGGCCAGCTG  
AACGAGACCT GGCAAAGTGG CGGTGACAT GGTGCCTTTC CTGGCTGAAT TTTAATGCC CGGTTTGGGC CCTACCAGCC  
GGGAAGCA

SEQ ID NO:313: (Length of Sequence = 302 Nucleotides)

CTTCTCATGC CAGTCTAATG ATTGTTTTTA GAAAAGGATA TACATTGACC TTCAATGTAA TAAGAAATGC AACACTTTAC  
GGTGTCCAAC TGCTAAGATT TATTTCCAAC TTGTCCAGACA CAACTATTTT GCCCAATCCA AATCAAAGGG AATCAAAGGCT  
GTGAAATCCA CACAGGACAT CAACGCACAC ATAAATGAAA ACTACAGATG TGTCAGAGGC AACCATATAC ACACAAATAA  
TGTAACACT AAATTCATG AAGTAGCTGT CCAGGAATA CTTTCCAAT AACCTTCAGC AG

SEQ ID NO:315: (Length of Sequence = 339 Nucleotides)

CGCGTTATTT AAATTGTGAA AAATAATGAA TATTAATTG GAGCATAATA TTAAATACA TGAAAAAGC TGGCTGGGAA  
ATGTTGGCAT GACTTTTCCC AGATGTTAGC ACTGCTTCAA CTTTGTAGAG NGCACTCTGA GTGTAAAGTT ACTAGACTGA  
CATTACTAAA ATCATTGGTG CTATAGAGGC AGGAGAATAC GGGGAATAAG AAAGCCAGTT GCAAGCCAAC AATCCTAAAA  
CTCCTCCTTT TGCCATGGAC TGACGGCATA TTAAATGAGA TCATGCATTT TAAGGNATTA ACAGTGTACA CCACATGTGC  
GTGTTCCAAT AAAAGGAAG

SEQ ID NO:316: (Length of Sequence = 430 Nucleotides)

TAAGTGGTG GTGCTGTCT GGATGCTTCC AGTGGGCCCC GACCAGGTCT GGACAATGCC TGGCGCCCGT CCCCAGCCCC  
TCATCTACAC ACACGCAAGA NTTGGGAGCT CCATGGGGAA CAGAAGCAAG ATATCCGTAA AATCAAAGTC TAGGGGGTGG  
GAATGAAAAG GGAAAAGTGA GGAACGGGGA GCCAAACCCA GGAAGACGCC TCTTTTCTTG CACATTCCCT CTCCTTTATA  
TACTCAGCTC TTGGCTGTCT CCAGTATGTA CCCACCCTGG TCTTCCAAGC TGGGAGCCAC TTTTATAAC ACAATCACAG  
TTTCACAAAC CCAGGAAGG TTCCATGTGG NGAGAGGTTA AGTTTCGNC TGTCCGGGG AATTATGACA CTCAGAATAT  
CCCCTTGGT GTAAATGGAA GACAACCTTT

SEQ ID NO:317: (Length of Sequence = 317 Nucleotides)

GTTAATGCTT CTNATACCTA ACAAATCCTG GAGGGCAGNC AGCACCAACA CTCAGGGTGC TGGGAAAAGG TGCGTGAGAG  
ATCTGAGGCA TCTCGGGGSC AGGGGAGGGC TGGGAAGGCA GGCTGGCTNG GACCCCTGCA TCTTAACCTA ACCTTGACCC  
TCITTCATG AGCAGAGTTC CGATGCCCTG GAAGCCTGGG AGAGTGGGGA GAGATCCCGG AAAAGGAGAG CAGTGCTCAC  
CCAAAAACAG AAGAGTGAGG CTTCCAGGGT GCAGCAGGGG TGGGAGGTGA TCAAGCAGCG TGGGGATTGT AAGCCCG

SEQ ID NO:318: (Length of Sequence = 407 Nucleotides)

CTGCCCCGC ACCTTCCCCG CCTATGCCCC TCGCTGAGAT AGGCCCTTCC CTCCTCCGGG AGCCTCCCGG GCCACGCGAC  
CCCAACTTC TCAGCCGCT CCACCCAGC ITCTGGACC GCTCCTGCA GCGAGGCTC ACATTCAGCA CIGTCCCTTA

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CAGTCGCCAT GCCCCTGGCG ACCTCAGTGT CCCACTCTGT AAGGGGACAA TGCAAATCCC TTTGCCTCAT AGGGTGCCATG  
 TGCCAGINTT GATAAAGTGC TGGCCACAGG CCTGCGCTTC CCAGGGCTCA CAACACTGTG TOCCTGACAC ACCCGTGGGC  
 TGTAGTGATT CINTTCATGG GGATTGACT ATAACCGCA GTCAGGAATG AATTTCACAN CATAGCTCAG TACATACACA  
 CATATCT

SEQ ID NO:319: (Length of Sequence = 382 Nucleotides)

CACTGCACAC CTGCGGTGG GGACAGGACA TGACTAAGCA CAGAGCTTTC TTCTTTTGGAG GCCACGCATG TGGTGACAGAG  
 OGGGACCACC TGCAATCCACA CAGCCCGGCG CACCTGCTCC TACTTCTGCT TAGCGTGTGA GCAGCTTGGT GACCAGGGTC  
 TOCACCAGGG GGCAGGCCAG GACCGCTTA CAGCACTTTC TAGGGGTCT CTGGTCCCGG GCTGGGACAC ATACAGGGCT  
 TAGTAAAGTT CATAGATGGT AGCTAGGCAG CCCAGGCC CAGGTGACAC CINTCCCTG CCTGNCCTGT ACTGNCCTGCC  
 TGCAGCACTC CTGGGAATCT TGTACGAAGA CAAGGAGAGA CAGGACTTCA TCTTCACCAT CT

SEQ ID NO:320: (Length of Sequence = 368 Nucleotides)

CATCGGGGC ATGGACAGCC CCGGGGTGN CCGCCGNC CCCCCTGCC GCGTCGGTG CNGTTCACCA GGCAGCACCT  
 GGACAGCTCC AGAGTCGGGG AAGCGCATG GTTCCTGCG AGAAAGGATG CCGGTGGGG CCGGCAGATC CTGCCAGGAC  
 TAGGGGCCCT CCCTTCCAT CAGGAGCCTG CAAGAGAAAC AAGAAACAT TAGAGGGCT TCTGTGTAGG GGGAGGGCAA  
 GTGAGTCTA TCTTCTCT TGTAGGTAAT AATTAAACAC CTGCTGTVIG CCTGGTACTN TGCAGGGTGG GACAGGCATC  
 ATAGCAACTC ACAGTGGTCC CCTCTCTTT GTGCCATAG TCTAGTAG

SEQ ID NO:321: (Length of Sequence = 355 Nucleotides)

GGTGGACTGT GCTGTGAAC TGAGCTGAAC TGGGATCAGG AGAAGGAGAA GTGGGGATG AGCCCTCAC CTCCACACAC  
 TOCTCTCTGT GCTGAAAT CCTCCATTAA GCAGCATGCG TGTCCCTGT AAACCCAC ATTAAGCCAT TATTCATCTT  
 ATGGCTTAG TAGCGTTAG TCCCTCAGAT CCTTCTGCG TGAAAGCGGA TCTGATAGA GAGAAGGGAA GAGAGATGGA  
 TGTCTTGGG GACGCAGGC TGGTCCAAGA GTGGGGAGGA AAGATGCTC TOGGACTCN GGENAAGAAA TATTTCTGG  
 GGAATATGG AGGCACCANA GGCAAGCTCA AGAGG

SEQ ID NO:322: (Length of Sequence = 225 Nucleotides)

CTCTCACTC TCACCAGGCA CCCACAAAGC CCCAGGCAG CTCCATCTTT CCAATCCANT CCCATTATCC CAATCTCTAC  
 CCCAGGATCC CCCAACTCC TCCCACTTCA CCTCTGCCAC AGACCCGCTC GCCCCAAAC TTCAGCCTNC CCTCATCTGC  
 CCTNACCACC CACAGCCCTT CCTACCTAGC CCTCTCCGC GACGGGCCCG CGGGCTCCCC ACATT

SEQ ID NO:323: (Length of Sequence = 250 Nucleotides)

CTCTGCTCC TGTCCGTGAC CTGTCAGATG CAGGTGACAG CTGCGCTTC CGTTTTTTC TTTCCAGTCC CGCCTGCCCG  
 ATGGGTTC AGCCCTGCC ACACGCGCG TACATCCGC CTACACTCAC CGATGTGCC TAGCAACCG GCTGCCCGCC  
 AGCATCCGA ACGAGGTCC CCGGCTCCA GTTCTCTGN GGGGAGGAG AGGGGTGTG CTCTCCAGC CCCCTGCAGC  
 CTGGTGTCTT

SEQ ID NO:324: (Length of Sequence = 338 Nucleotides)

GINTCTTAT GCGGATAAAA TTTCTNAGGT AAGAAAGTT AGCTCTGAGC AGCCCTCCGC CTGATACTAA TACTTTACCA  
 ATGGAGATT TCTTTTCTT TTCTGTTTT GAGACAGGT CTCACTTGT TCCAGGCT GGAGTGCAGT GGTGCCATCA  
 TGGATCACTG CAGCCTCCAT TTCCCTGGCT CAAGCCATCC TCCACCTCA GCCTCCGAG TAGCTGGGAC TACAAGGTGT

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GCACCACCAC GACTGGCTAA TTTTAAATTT TTTNNTAGAG ACGGGGGTTT CCCTATGTTG CCCAGGCTGG CTIGAATTCC  
TGGGCTTCAA GTGATCCT

SEQ ID NO:325: (Length of Sequence = 461 Nucleotides)

ACTCCAGACT CCTCCAGCTG TCATGGATCC TGGGCCAGGG GATCCCGNAC TCACCCAAAG TGGGGCTTTG GGCGGTGGTG  
GGCOGGTTCA GTGGTGGAGC GTCTTTTGT CCAGCTCAGA ACGTGTGCC GGTCGGTCC CAGAAAAGTT TCTAGCGGT  
GTAGTTGCCA AAATTAGGGT CTGTTACTGC TGGGCTGGCG GTGGGCGCT CATCCAGCC TTGGAATCC TTGCCTAGTA  
GCGGGAAGTT CTAAACAGCA AAGGATACAA GGCCCTTGA GCGCAAGTAA ATTTCCCTC TTGCAGCAAC AGGTGTCTC  
CAAACCAAGC AGCGTCCAG TGTGTCGGT GGCTGGAGTT CTGAGTNGG GTGTGGGGAT TGGGAAGGTG CACAGGCAGC  
CGCTTGAGAC CCAGAGGCAG TTTGGGGGAG AGGCCTTGGG CTCAGAGGCC TTTCTTTGTT T

SEQ ID NO:326: (Length of Sequence = 391 Nucleotides)

GGCCCTCCAG TGTCTGCAG AGAGGCACTC TTGCCAAGTG TCATTGATGA CGCAGCTGAA AACCAGAAAC ATTTCACTTT  
CCAGCCACGA GACTGCAGCA ATCTGCTCTT TGGACTGCAC TTAGGGAAAC CGAGGCCAG ATAAGTACC CCTCAAAAGC  
CCCCAGCAG GCAAAATCAA AGGGCTGAG GTGCTCTGAA CAGCCCCAGC AAATTAAACC ACCTAACTTT GCGCTACTCC  
CACTGCCCTG AAGCAGCCTG TGGTGGGAGG TGGGGTGGG TACAGTGTGA CAAAGAGAAA CTTGAGTTGT AGCCATAGAT  
TGCTAATCAG TAACAAATA TCCCTCTAA CCCAGTCTG CTTGAACCC ACAGGCTCAG GATGGTAAAT A

SEQ ID NO:327: (Length of Sequence = 438 Nucleotides)

TACTGACTGA CCTGGG GATCCAGC CGAGAGTTT CTGCTCCATT CCGGCAGGAG CTACCTTCCC GAGCCGCGCT  
TTGCTACCT GTAGGAG TAGAGGGAAA TAAGACAGCC CTTCTTAGGA TGGTGGAGTG GCTAGAAAGA AGCAATCCAC  
GCCAAAGGCT TAGCTCAGTT CCTAGACTTA GTAAATGCTC AATAAATGTC TGCCATTGTT ATTATTATTT ATNATGCTTC  
CAGCTGGCCT GGAAGGAGGG TTCTGGAGCC AGAAGGAGC TTGGAGAGAC CTGGTTAAA TCTTAGCGC CATCTTTATT  
TTTAGGATGG AGTAACTTGC TCAGGACCTA CATCTAACAT TGTGGAGGGG ATGCGGTTTT TAAGTAGGAA TTCTTNGACT  
AGACCTCTCA GCAACCTTT CCTTTCGGTG ACAGTGGG

SEQ ID NO:328: (Length of Sequence = 400 Nucleotides)

TTGCCCTCTC GGCCTAGAAG TCTCCCATTA TGGTGTCTGT TCTGCTGGGA CCCACGGGGC GCTGCACAGG GAACCATGTG  
GCGTGAACC TCAAGTCNG NCCAGCAGGG GTCAATGTC TCAGNCCACC CCTCCCTACC CCCAGTATCC TCTCTCTTT  
ATAGATCATC CATTAGTGC CAGACACTGC AGAAGGCACA TTGACTAATA TTAAATATTA GCCCAGCTAC CCTGCTGGGC  
TGTCTTCTT AGAAATGAGG AAGTGGAGGG TTAAGTGGAT TTCTCAAGGT CGTGCAGCTG GTAAATGGCA GAACCAGGAT  
TTGAACTCAG GTGTGCATGA CTTCAAAGGA AGACACCACT GAGGCTCTCT CTANTGGGTC TGCNTCCCTA CCGGCCCTGG

SEQ ID NO:329: (Length of Sequence = 227 Nucleotides)

GGCTGGGCTA AACTCCAGAC GCTGGCCACC TTCATAGGGT GGAGATGACA GAACAGGACA GGAGCCATGG GGCTCCCGGG  
GCGGGTAGGG GTGGGTCAATG TTCTTTGGCT TGGGGGCACT TACAAGGGTA CAGTGGGGCT GTTGAAGGG CAAAAGTTCT  
GTAAGTNGT CCNACAGGC CAAAGAAACC CCAGAGCCGT CTTTCGACTG ACTACAGCCT GGAAGAG

SEQ ID NO:330: (Length of Sequence = 401 Nucleotides)

TGAAAATATA TCCACTGTT AGAGGGACAA CAAAGSCAGT TAGACTGTCC TGAAAGGTTG TGCTCAGGC TGAAATTTTT  
GTAGCACTTG ATCAGTTGCA AAGTATCTT CCTTTAATA TCTATTTTA TCATTGGGTA TCTGAAGAGG AAGTGAAT  
GGGTAAGAA TTAGGTTCT TGCCATAGCA TTTGGCTGCG CAGGTTAGC CTCAGGTGG AGGACCTTA AAGAAAAC



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TAAGGATTTT AAGGAGAGTC AAACCTCTACA TTCATCCAGG CAAACATCTA CTCTTCCATT GATTAAATGNN TCCACTCATC  
CGTGCAACAC ATTCACCTCTT TCATCCATCC ATTCATCCAT CTATCCTNCA TCAATCCATC CATGTATCTT TCATTATCC  
A

SEQ ID NO:331: (Length of Sequence = 322 Nucleotides)

CCCAACGTTG CCCCGCCTTT GTCTCCAGCG GACTGGAAG AACCCACCAT TGTGAAGCAC AGAAAATTGC CCGCACTCTT  
ATTGGCTAGG TTCCCGACT TCGCTCTCG GTTGGTGGTT GGCTTTGCCT GTTACCTGTG TTGCCCACTA CCACTCGCTC  
CGCGAGCCC CAAGGATGGA TCGCTATCCC GTAGCGGGT GTTCGGGAGC GCTGCGGGCA AAGCAGACCG CCTTGCGCCT  
ATTATGGGTT GAGTGGCTCT GACTCTAGA TCGCTCTGT CACTTACTAA TGGGCGGTGT TGCTTTCGG ACTGCAGGTT  
TT

SEQ ID NO:332: (Length of Sequence = 441 Nucleotides)

GGCTCAAGNA ACCTGCACTC TTGCACTCTG GCTTCTCTCC AGGCTGAGCT TTATCATATC ATCAGCAGCA ACCTGGAGAA  
AATTGTCAAC CCAAAGGGTG AAGAAAAGCC ATCTATGTAC TGAACCGGG ACTAGAAGGA AAATAAATGA TCTATATGTT  
GTGTGATTTC CCTTCTGGG TGIGTCATTC ATTCAAAAAG CATTATTGA GTGGCACCTA TGTCAGCCT GAAGATGAAT  
GTGGTGGGAA GGGGTGGTG TCACAAAGAC AAAGATGACT TAGATGCCCA CTGTAATCTT GACTGTGAGA AAGAGGGGAT  
TCAGGCCCTT TCTCATCCAG TATCAATGT GGCATCTCCC CTTCCTAGT CACCTCTTAT CTTCACTTAC CTTCTTTCTT  
CTCTGCTTA TCTGTTTTCC ATCTAAGGCA AAAAGGGGGG G

SEQ ID NO:333: (Length of Sequence = 354 Nucleotides)

AGAAGCGTAG ACOGAGTAGC TTGAGCGCT CTTCGGTGA CCTTTTCCCA GCGCCAGAGG GCCTTAGGGT TGGGGTCTC  
GCTCAGGCAC AGAGNCCGA CACGAGCGG CGGCTTCCCC GGGATCGAGG GACGCGCAG CCAGAGGAGA CGAAAGGAAC  
CGGGTGGGA CCAGATCGGA ACCACTGACC ATTGCCCATG GGGCCCTAG TGAGTNTGGA TTTNGCGGGG TTCGGGGGTT  
COGAGGCGA CCTCGGCGAC CCTCACTCA CGGCTTCTC TTTCNCAGG GNCCTAGNAG CCAGAATGTC ACTGAATAGC  
TNGTTCAGT TCCTAAGTAA GTCCCCAGG CCAAT

SEQ ID NO:334: (Length of Sequence = 196 Nucleotides)

CTCCGCTCC GCACCGCCT TTCCGAGCA GGCTACACCT CTCCCTGGG CATCTTTACT GGAAAGCCGG CAGNGGNG  
GGAGAAGTGA GCNCGTCTC CGCGCTCTT CGTCTGCT GGCTGAGGC GGGGATGGCT CCGGAGGGAG ACACTCAGGA  
AACCACCTCC GCGCTTCCC CATCTTATC CAGCG

SEQ ID NO:335: (Length of Sequence = 261 Nucleotides)

TCCGAGAGCT GTCTGGGGCC AACGTGCTGG CTGAGTACTA CTGGCTCANA CGCGCCTGC TGGGGGCCCC TGGNAATNTA  
AGTCTGCCC CGGGCTGTGC CGCCCTCTC CCTGANAGCC CCTGCTNCC TGGGCACAGG GAAGCCTCCA TAGGCTAGTA  
GCATCACAGT GCCAGGCCA GAGCTTACTG GACTTCCCA GGTCCTATGG GACTAGGGCT GAGGGTACAC ATCTGCTTT  
TTCCAGAAT ATAAGTTTG G

SEQ ID NO:336: (Length of Sequence = 191 Nucleotides)

CGGAAAAGCG CTTCGGCCAC ATCCAGCAGC AGTAGCAGCC GCAAGGNCOG GGACTGGAAG GCCACCGNA GNOGGACTAA  
GTCTGCCAAG GAGCGCCTT CGGCTACAA GGAACGNCOC AGGCTTACC GGGAGGACAA GACCGAGCCT AAGGCCTACA  
GGCGGCGGCG GTCCNTCAGC CCACTGGGAG G

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SEQ ID NO:337: (Length of Sequence = 279 Nucleotides)

CCTTAGGGCT CCTCCTGACT CCTTCCAACCT CCCAAGTCTG CAGCCCAGGT AAAGCCAGAG CAGACTNAAG GCAAGTTTTTC  
 AGGAAACCG AGGGCTTGAT CCAGACTCAC AATCTCCCTG CAAAAGTKTT CAGAACACAC CGCACAAACA CACACACGNC  
 TCACAAAAC TCTGAATGTC GCTCTGTCTC CACCTTCTCC AGTCACCGAA AGACCTCGGC CTGAATTGGA GCGCGCAGCC  
 GTAGCTGTCC CINTCCACCT GINGCCCTCG CGGAGGCTT

SEQ ID NO:338: (Length of Sequence = 339 Nucleotides)

CCACNCGTGG AGGGAGGCAA AGGGGCAGCA AGAGAGAGGG AGGAAGCCCC ACTCTTTTAA AACAAACCAGA TCTCTTGTRA  
 ACTGAGAAGT CCCTTATCAC CAAGGGGACG GTGCTAGACC ATTATGAGG GWTCCGCCTC CATGGGCCAA TCCCCTCCCA  
 CCAGGCCAC CTCCAACACT GGAAATAACC TCCAGCAGG CCGCCCTCCA GCACTGGAAA TAATGCTTCA GGTGAGACT  
 GGAAGGGGAC TGATGGAGCC TGGWTGTTK TCCCCGCCA GSTCTMACGC TGAACCGTAA TCCCAATGC TGGAGGCGGG  
 GCTGGTGGG AGGTGACTG

SEQ ID NO:339: (Length of Sequence = 334 Nucleotides)

GGCACCGGGC TGTCTCTNGT CCAGCTAGCC TCACAGGGAG TGGCCTCTAA AACNGGCCGG CCCACNCCAT TTGAAGCTG  
 TCCCGGGTTT TCCGTGAAGT CCTCCCGGCC TGTGGTCTCC TGGATGGTCT GGACCAACAG CTTGGGGATG AGGGGAGGCT  
 CGGGGGCAAG GGCAGGAGCC CCAGCCAGGC GCTGGGGGTT TGGCTGATCG AAGAGCTGCA CCACCCNGTA GCTGGCCAGG  
 TGAGTATNGG CGTCCACCAG GTGCAGACAC ACATTCTTTT CTTNACAGC CTCCTTACCC TGGAGTTTAT AGCCAAACGT  
 GAGGTGATC CAAT

SEQ ID NO:340: (Length of Sequence = 450 Nucleotides)

GGCCCCACAA TCCCCTTCTG GCTCCGGGA CGGCGGGGC GGGCGAGCG GCGGAAATA ATTTTNGTT TGGTCGTCTC  
 TGCCCCAGTC CCTTCGCGC GGGACGGCA GACGGGAGAA GGTGCGGGA GCGGGAAGCA GGAGCGGGAG CCGCGGGCCC  
 TGGCAGCAT AGGGCGGCG AGAGGGCAG AGCAGGGATT GAGCACCTAC TGTTNGCCTT CACGCTTTAC AAAAGGATTT  
 TCGTTCGATG TTCCTACAG CCCCTGCCC GGGGTACTGA TGCCCCATTT ACAGAGGGAC AAGCCGATT TCGGAGAGGT  
 GAAGTCACTC GCGAAAGTC GCACCGCAG GGTCTGCGTG ACACCTTAA GCAGTGTTC GTTACCCCGG GGAGAGCGCG  
 ATGAACCTGA ACCACTTGTG GGCTTGGTTC CTGCTCTTGC TCGTTTTTTT

SEQ ID NO:341: (Length of Sequence = 192 Nucleotides)

TTCAAACCT GCGGCACGG CTGTCCCTC GAGGCCCGC CCTTCCCTT TCCGGAGAGC CCACCGCTGG GTCTAAAGC  
 CCACCGCTGG GTCTAAAGC CCGCCGGTIN TTACCCAGG ACGGGGCTGG GGAAACCGG TCTTCCCTAG CTCTTGNTT  
 ACTTCCTGGA GACTTCTTAA AACGAGAGGA GA

SEQ ID NO:342: (Length of Sequence = 229 Nucleotides)

GTGGTAACTT TTTTAAAAA CATAAATACC ATACAATTCA TCCTTTTAAA GTGTGTAATT CAGTGGTTTT TGGTATATTC  
 AGTGTGAC AGTCATCACC ACTAATCCA GAATATTTT ATCANCCCA CGGCTGTATC TCCATTTCT CTCTCCCKG  
 CAGATCCTGG CAACCGCTGA TCTACTTCT GTCTCTTACA GACTTATCTG TTCTGGACAT TTCACATAA

SEQ ID NO:343: (Length of Sequence = 229 Nucleotides)

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TGCTCCAGGA AATITGGAGTT CNAGCTGAAG GCCTTGCNGC ACTCCGNGCA CTGTTAGGGC TTCINGCCCG INTGCGTGG  
 TCGGTGCTGC ACCAGCGTGG TGCTTCGNCC GAAGACTTGC CGCAGTCCGG GCAGCGGAAG GGCTTCAGGC CGCTGTGTGT  
 CTCCTGGTGG TGGATGAGCT GCGAGTNGC GCGGAAGGCC TTNCCGCACT NCCTGCAAGC GTAGGGCTT

SEQ ID NO:344: (Length of Sequence = 227 Nucleotides)

TCCGAGATC ANATTCAACC TTGCCAGAGG TCAGGSCCCC CGGCTTGGC GGCGGGCCAG AAGCGTGAAT TGGCTTCTG  
 GAATGCATGC CCTAAACAT CTCTAGACTA GGGCAGTGT COGCCAACCA TGGAGGCCCT CCATCAACAT CCTGCAGCA  
 TCACCACNT CCAACCCCA TGTCCACCC TGGNGTTC ATACCTGTAG TAAGAGAGCA AACCAT

SEQ ID NO:345: (Length of Sequence = 249 Nucleotides)

GGCAATGTT GTACAGATG TGTGAGATT TTSCAGAGGA CATAAGTTGG CTGTGAGGWA GAACACAGAG GTTSCCTATT  
 TTTTAGGCAG GAAAGAAAGC CTGCACTTTT CTGTGTGTGT GTNTCAATAA ATCTGAATAA CACCTTGAAA GGGTTAAAAA  
 GCTGAGCACC AGGTGTTTTT TTTCCACTTT CCAGAGTAAT TTAAGCACAC NSCAAAGTTA TCTCCCTTCC TTCCCCACGA  
 GCCAGCTTA

SEQ ID NO:346: (Length of Sequence = 356 Nucleotides)

ACCTAGTCCC GCAGCGCTG CAGCGCTGG GTTGGCGGAA GAGCTGGACG CCGAGCTAGA GGACGAGGCA GAGCTGGACA  
 CAGTGGCGGC GTGAATTGGC CACTNCTTTC GGAGCCCGAN CTCTCCCGCA CTGGAGAGGA CTTCTTCTTG GCTGGGCGGC  
 TCTTGGTTC GTCGCCCTC TGCTGCTGT GCGCGCATTT NGCGCGCGG TTCTTGAACC AGACCTGCAG TGGGCGGGAT  
 GGGGGAGAGT GGGTCAAAGG GAGCTAGGGG AGCTTNTTGC TCCACCGNCC CGTGGACCCA ACTCCCGTTC CAGAATATCG  
 CAATCCTTTC TCACGAGGC CTTCGACCTT TCTGT

SEQ ID NO:347: (Length of Sequence = 155 Nucleotides)

GCGCGGTGC GTGGATGCC CAGCTGGGT CCAGACCGC GGGATGCAGA CCGGTTTCAG TCAGGCTTGA GGGCTGCTCC  
 GCATAGACCA ACGTCCGGG AAGGCACACA GTGGCGAGG GCGCGCGC TTKGGCTACG GCTGTATAGG TATCT

SEQ ID NO:348: (Length of Sequence = 362 Nucleotides)

AATTCGATT TAACGATTG TCTATTCTG CTCATACATT TCAAGTTTAA ATGCAAGCAT AAAATGTTTA TCAACAAATC  
 TAGAGAGCAC TTGGATTTIN AATTTTCTG TGATCACAGT AAGGAGCATA AAAAAGAGTA TCINCTGTTA CACAAGGCTT  
 GINCTCTCTT TACATCTCA GACTTAAAT CTGTAGAAG TAACAGCTTT GTATTAGGA CAGAAGCTTA GTGGTCACAA  
 ACAAAAAATA ACAGTGAAT ACAATTGGG NATTANTGAT ACTGTGTGTC TCAAAGGATA CCTGAACAT TACANTINACT  
 AATAATTGG GCAATGAGAT TCCNGGTGN TTCAACTTTT TG

SEQ ID NO:349: (Length of Sequence = 342 Nucleotides)

AATCCMTT TTTTTTTTT TTTTTTTTT TTTTCAAGTAT CACAATGTTT ATGATAGAT ACAAGTATAT  
 AAAATCAGG CATGANCATG ACTTGATAA TTAAGTAGAC TTAATTTCAA TACTATAATA GNGGGACCA ATTCAAATTC  
 TCACCATTTG TTTCACACC ACAAAAACCA CTTCAAGGGC ATTAACGNTC TCTCAAACT GNTCAGTTTT GTGCAAGTAA  
 ACCATGTTT TTTTAAAAAG ACTGTGTCAC TTGCCAGGC TCAAGTTAT TAAAATCTAG GCACATAAAG NCCATTACTA  
 GAGGTAGGAA ATACAGGCAA TT

SEQ ID NO:350: (Length of Sequence = 384 Nucleotides)

GATCTGIGCT AGCTGTGAGG CAGCTCTGGA ACGTGAAGAG CTGTTTGGTT TGANCCGTGA ACAAACCTGT GTTTTGAGTT  
TAGCTGACAT TAAAGAAAAA AGTTCATCAC GTGACTGTTA ATGTAAACCT GGTATTATAA ATAACATATT AAAACAGGAG  
AAATCTGGTA AGTTGTTAGG NITCTAAATT CCTTTTAGTC TGTTCACTGA GATATTAAAT TTCAGTAGAC AGAACCCAAA  
AAGAGATTTT ATTTCTTTCT AATCACTTTG GCTTCNTCT NTTTTNTTAA GTAGGTAAAA ACCTTCCTTG GTGGGCACCT  
AAGCAGGATG CAGCCAATTA GTTCATGAAC CCAGCTGCGG ACGTGAAGGC TTAAATCTA AGGA

SEQ ID NO:351: (Length of Sequence = 305 Nucleotides)

ATCCTGACCC TCCCCACTGC AAGCCCAGGG AGCCCCAGCC CAAGATGGCC AGCCTGAAAC TGTGGCCAG GGCTCCTCTT  
GTGGCCATGT ACCCAGGGCT GGCTGGCCTG CCATTTCCT CTCCCGGAG ACAGCCGTC TTCTGCAACC ACACCCCGTG  
CCTAGCCACA ACCCCAGGCT GCAGCTGCTC AGAAGCTCCA GGCATTTTGT TTCTGGTGAC CGCCCTAAT GGGATATCGG  
TGATCACTGG TCCACCCCTC CTGTCAGGGC TTTCTGGGG GCTGCTCTTG GAAATGAAGT CTAA

SEQ ID NO:352: (Length of Sequence = 270 Nucleotides)

GAAATTACCC ATGGTCATAT CTAGCCTACA AAGAAGAGAA AATACAGTGA TTCAAGTTTC ATTGTATTCC TCTCATTGAT  
ATATTATCA ACCTTCCAAT TGAAGGAAGT GTCTTCTAGG CCTTTACAAA GAATGTAACC AGGGTTTAGG TATACAAGTT  
GCATATGATA AATCTGTCAT GTTCTATAT AAATCTGTCC ATATTCCTCT TCTGAAATGC ATTATTTTIG GGGGAAATTA  
AAATGTGATG CAAAGATCCT TATACTTTGT

SEQ ID NO:353: (Length of Sequence = 195 Nucleotides)

GTGTGATTCC ATTTATATGA AATGNCCAGA ACAGGGAAAA CCTATTINAG ACAACAGAGA CACAAAGTCG ATCAGCAGTT  
GCCAGGGGAG GAGGAAGACG GGAGGGGAAA TNATTGCTTC ACGGGTGAT GACAGAATGT NCCAGAACGT GACAGAGGTG  
GTGCTACAC AACTTTNIGG NIGTACTAAA TGCCG

SEQ ID NO:354: (Length of Sequence = 388 Nucleotides)

GCCAATTTTT TTATTTTGT AGAGATGGAG TCTCCCAATG TTGCCAGGC TGGTCTTAAA CTCCTAGGCT CAAGGGATCC  
TCCAGCTGG GCCTCCAAA GTGCTGGGAT GATAGGCATG AACCACCAT CCCAGCCAT TTCTTTTTC CCTTGCACA  
GTACCAGATA TATGGTTGGT ACTGCAGAAA TAATTTCCCC CTGCCCTCTA CATTGATCAT TTGATGACCA AATAGTGTCC  
GTCTAGCCAC TTATTTATGA TTGTACAAA ACATTCGGCT TTCTGAGGTA GACAGTGATA TTCTGAAGCC ATCAGTAAGA  
GTAATTTTTC AGINTTGTG AAAGTGGENA TTCTTTGTGT AAAGGTCAGC CTGTCAAGGA AATAGCAT

SEQ ID NO:355: (Length of Sequence = 288 Nucleotides)

TAAAGTGAAG TATTGGGAAA GGAACATCT CACTCTGATA GATTGAATT TNCTATTCT GCTCTGTGAC AAAACCTGA  
GTGTATATGT GATCAGACAT TTACAAGGCC CTGCATTCTA CCTGGNAATG GCTATAGTGG TGTGAGCTG CTGTGAGATG  
ATTIACGTCA ATTTGTCACT TTTGAAACT GTTCCAAAT AGTCTGCTGA CAGCCCTCC CCTCATGAAA ACATCTCTCC  
TTTTCCAGTT AAAAAACAG TCAAAAAACA CAAAAAAGG CCACCTCC

SEQ ID NO:356: (Length of Sequence = 401 Nucleotides)

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GGRAATTAGG TTGGTTATTA ACATGTATAG ATGGAACCTGG GGTGAAAAA AAAAGGAAAT GGGAAATGGAG TGAAGGGTT  
 GGGTGGGAGA GACACTTCAC AGTATTCTTT TTGTTTIGAC TTGGGAAATG TTACTATTTT ATAACTTTAA AAAAATGCAA  
 AAAAAAATA TCAAACTAG GTAGGAAGGA GAACAAAATG AAATATAACC AGAAAGGAAT AANCTTAA CAATTTTGAGT  
 GAATCACAAA GCCAAACCA AAAAGAGCTA ATTTAAGTCA CTTTAAACT TGGTGTAA CTACCTACAC TCAGTCTAAA  
 AACGGNAAT AAGGGTAAAG AAATAGTGA ACTCTAGTTA GTTGGGTCTT TTCTTTACAG CAGTATGGGG ATGGCAACCT  
 G

SEQ ID NO:357: (Length of Sequence = 275 Nucleotides)

CAGACAGTGG ATAATAACA CCTCATTAGG AAACCGATCT CAGAATGANC TCTGGAGTAT GAAAAGATC ATTTCTTTTT  
 GINCTGTAA CCTAGCATT CTCTAGGCT TCINCTCTT TAATTGAACC ACAGCTTAGC TCATGTATTC TTTTATTAAC  
 ACCCTGCTCT CATGTCCATA AGATTCAGGA ATTTAGGAAA TNAGGCTGGT TTGAAGAGGG TAGAAAGCAA TAAAGGCAGN  
 AAAAAATAAG NCTAAAATCA GGGGAAGATG TATTT

SEQ ID NO:358: (Length of Sequence = 314 Nucleotides)

GTGAAGGAAG TATGAAACT GAGACTAATA TTATGAAGTC TTTTITTAAT TCITTATCTT ATTGCCATT TTAAACCCCT  
 TGGTGTGTA AATGGAAAAT AAATATNCTC TTGCGATAG ATAATATGTC AATAACCAA AGGTGGCCTT AACCAATAAT  
 TGGCCCACT TTAAATTATT ACCCTAAAGA TATATAAATT ANCTAATCTA AAATTAAATG CAATTTTGCT ATGACTTAA  
 GTGTANTAA TCCTGTATAA GNGATCCTT TTATGCAGTC ACTTAGGCAT GAAGTTGGCA ATTCATCTAA ACTT

SEQ ID NO:359: (Length of Sequence = 372 Nucleotides)

CAAGAGAGAC ATAGCAGGCA TTGAACAAT GGAAATGCCC ACATAGCAGA AGGGAGTGAG GGGATCCAA CTACAAGAGC  
 GACAAAATCA ACTGTGGATC CAGAGACGAA AAAATGTTCT GTAGTGCAA GGTAATCTGG TGAGATGAAA AAAAAAGAAC  
 CATTTTTAGA AAAANGAAT ATTAGAAATA TTGAAGTAAA TATCATAAGT CATCTATTA CAAAGGCATT AACTCCTTCC  
 TATCAATAGA ATGTACCAAT TTAAANTTT TTAGTAGGAA TATATCTTT ATTTTATTA CAGAAATCAN GGGACAAAGA  
 GGATTTGATC CATCCATACT TCCTACTCTT ATTGGGTTTG TCAAAATGTA GG

SEQ ID NO:360: (Length of Sequence = 395 Nucleotides)

GCATCTTTT GATACCCACC TAATAAGAC AATCTCTAAA ACCAAATAAT AGGCTATGAA ATGTATTGTG AGTNCCTATT  
 TCATTCAAGA CAGAGCTTAC CTTTAAGTCT CCAGCTGAGA CAGTTGGTTT TATCTTTCTG AAAGCAGTTT GGTCAAGTGT  
 TTCAAGTAAA TCAAAGATC GGTTAATCAA TTCTTAGCG AATTGGATTA GACACTCTCA TTCAAATGG CAGTTTATG  
 CTTACTCATT GTCTGAATA ANCTTAAATA CTTTATGCTA TCTTCTGCT CCATTATTA TGTAACTACT GGCNCCTTAG  
 TATTCTGCTT TAGNCAATAT AAAATCACTT NCAGGTATTT TCCATCAGG ACACAGAGGC AGGCACAAAT TAACC

SEQ ID NO:361: (Length of Sequence = 298 Nucleotides)

ATTTTTTGT GGGGAGAACA TTAAAGACCA TTCAATGTC ATGATGAAAG CTAATGGGAG AAGGCTTTTN TNCACAAA  
 ATTINCITTA TTTTINCAAC TTTATGAGG TTATAATGA TATTAAAAA CTGTACAGAT TTAATGTGTA CAGTCTAATG  
 AGTTGGGACA TATGCTTACA CCCNIGATGC TGTTACCACA GGCAAGGTAA TACACATATC CGTCACCTGC AAGAGTTTCT  
 GIGTTTCCN NIGTTTCTCA TTTTGNTTTT TTCAAAATTT TACTTTATAG CTTTATAG

SEQ ID NO:362: (Length of Sequence = 437 Nucleotides)

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ATGCTGGAAG TGATTTCTGC AGCTCAGGAT TTTTTTTTTT AGCTACATTG AAAATATAGG TTTATTTTTT GTNCAGGTTT  
 TNCTTTTATA TTTTTTINCT GCACAAAGGA GGAGGATTTT CCACITACTC ATATCGAGGC CAGATTTTTA AAGCCAGCTA  
 AGGCAGCATC AGCTGTGCGG GATTTAAAGC CTATAGCTCA GCTGAAAAAA AAGGTGGGGT GGCGTTTCAT GTAATGGGAC  
 ACGATGCCCT TCTTGCTGAA CCACTGGAAA GAGCACAAGG AGCACTTTTC CTCTCCACT GCCCGCCGGA GTTCTCGCT  
 CAGCTGAGGG GAGTCGTCT TGGGCGGGGA TGGGATGATC ACTTTGTGTT GCTTNTCGCT GATGGTCTCG GAGGCTGCCA  
 AGAAGTTGAG GTGTAATACG CATCAATGTC CGTGGCG

SEQ ID NO:363: (Length of Sequence = 449 Nucleotides)

TGATTGAAG TAAGCTTTC ATGCTTCACT TAGGGTGGGA AATTTTAAAT ATCAGAGCTT TCTTTGTTAG CAGCATATAG  
 TTATGCAATT TATTTAAATC TGCASTGCCA ATCTTTTTTT GATGGGTGTG CTTAGACCAC ACATTTAAGA TAATTATTAA  
 TATGTTAGAA CCGAATATAT TTINATGATT AGTTTTTATG TGTCATTTTG ACTGAATTAA GAGATGCCCA GACAGGTGGT  
 TAAAACATTA TTNCTGGGTA TGTTGTGAG GATGTTTCCA GAAAAGGCTA GCATTTGANT CAGCAGACTG AGTAAAGAAG  
 ATAAAGATAA TACTTGTCT GTGTACAGGC ATCATCCAAT CTGCTCAGGA CCCCAATAGA ACAAAAAGGT GGAGGGAGAG  
 TGAATTATGT CTACCCCTT GAGCTTGGGA CAGCCATCTT TTCAATCCC

SEQ ID NO:364: (Length of Sequence = 282 Nucleotides)

GACTGTGTAA ATACACTTAA TTTTCCATT TNCOCGCTG GCGACATGT GAACAGGCAG TGTGCAAAAT GGTGGCGGGC  
 AGTGTAGGGG GCGTGTGGAG AGCCCCGTGG GTGNTGCCC CGGTCCCGAG GCTTCGTAAC ACTGAAAAGT GGGCAGCTAG  
 GAAGCGGGGA CGGAGCAGGG GTCCCCACCC AGGAAGCGCC AGGAGATTN CTGTAAACGC TACTCTACTG GAGGCTCCGG  
 GAGCACCGAG NGGGGCGTCC CCCAGGGTCA TGAGGCCCGG GG

SEQ ID NO:365: (Length of Sequence = 349 Nucleotides)

TTCAAGCATT TCTCTGCCT CAGCCTCCA AGTAGCTGGG ATTTTCAGCAC CTGCCACCAC GCCCAGCTGA TTTTGTATT  
 TTNAGTCAAG ATGAGATTTT TGCCATGTTG GCGGGCTGG TCTTGAATC CTGACCTCAA ATGATCCGCC TGCTCAGCC  
 TCCTAAAGTG CTGGGATTAT AGGCATGAGC CACACANCT GGNCTTTTIN TCTGTCTCT AACTGTTCCC TTTTATTTCC  
 CTATGGAGCA TCTACTGAGC CCCAGCGAG AGTAGAAACA AACCTGCTGG CTGCTCTNAA GGCACCTATA GTCCAGTTA  
 GGGGNGACG GGTCACTTAA CCACTTAGT

SEQ ID NO:366: (Length of Sequence = 366 Nucleotides)

ATGCAAAGGA ACAATGGTGT TGGCAAAGTC TTCTTTGAAT ATCAGAGACT GAGTCAATAA AAAAAATAGT AGAAAGGTGG  
 CTTTTACTAT TGACAAAAGC CGGGGTCAA AAAAGTAGTT TAAGTCTTAA GNTGAATAT GCATTAAAGT ATGCAGGTAG  
 CAAAGATGTA ATAAATTTCC TTAAAAAAG AATTAAGT TTTATTTAGA ATCAATTTTA CNGTTCATT TAATTGACCC  
 NCTGAGNAT TACAATAAGC AAGAGGAAAT TAAGGTGTTT TGCAAGAGCT GTATTTATAT TACNGNTTTT TAAAAACCAT  
 TTTCTGAATT ATCGTAATTA AAGCTCTCCC AACTCGTTTA AGTCAG

SEQ ID NO:367: (Length of Sequence = 391 Nucleotides)

GCAAAAACAA ACAACAAAC CTTTAAGTAC AGTAGTTCCA AAACACACTG CTAAAGTTAT GAAATAATTG TGGATCATTT  
 CAAGTAAAAA TTATTAAAGG AGCAATAATT AACCAACAAG GGCATATAT ATATATNCNC CTTAGATTCC AGCAGAAAGA  
 CTAGTTTAA GTAGTAACAT GCACGTTGAA GTATTCTACA TTTTCAGTCA CTAAACTTT CCTCTCTCAG ATGGCTACAA  
 CTTTTAATA TTGAGGINT ATTTTATATC TAAGTAAAG GATTCCAGAA TACTCCTGCC CTGCAAAACA GTAGTGTTTT

AGAAGNCTCT NGGAAGTGTT GCTGTTTACC CTTTAGCAAA GNGNTACAAG AGCTATTAGT TGTAAATAA C

SEQ ID NO:368: (Length of Sequence = 370 Nucleotides)

ATTTCCTTC TGCACCTGGT TCTCTGCTC CCCATTACAA TGGTTTACTT CATTTTCTTC TTCATCCATT GGATTCACAT  
GTTTCTTAGG CCAATATTCC AGGNGTGCTT GGAGTAAAAG TCCTCCTAAA TTCAATTTTG GNTCTGACCC ATCAGGGCTG  
CTGAAACCAG CATCTTTTGC AGAAACCCAG GCAGCAAAAC AATCATTTC ATCCAAAGTA ATAGTTAACA TCCCIGTTTT  
TAAGTCTACT GAGAACCAAT TTGGCACATA CACCATTTTA AATCTTINCT TAATTTGATC TTCAAAATCC ACTTTGCCCA  
GATCTTCAAC TTTACATGGC TTCAATACAT CCCAATATGN CACATTATTA

SEQ ID NO:369: (Length of Sequence = 315 Nucleotides)

GACAGGTATT CTTTGAAGT TTTTGTGTTA CTTATGTTTT NCTCTTTTAC ATCTCCTTGT GAATTTCTGT CCCATTTTGA  
AGTCTCTCCT TGTCTOGAC CAAGATCCCC TTGATGTTCT GTAGCCAAAG ACTGAGAAAA AGAGTTATTC TGAATGATGT  
AGAGGTGAT AAGTCTGGTA AGAACTGTT GGACATACTC CAAGCAGCAC TGCAATGCGAG TCTTTTGGGC TGCTTCCCTA  
CTTGGGGTTG CTGTCCCCTG AGTGACTACG GAAGGGGTCT GGATGATGGT TTCTTCAGAT CCCACAGTGG ATGCT

SEQ ID NO:370: (Length of Sequence = 442 Nucleotides)

AACACTTTTA CACTGCTGGC CTAATTGTGA GATATCTCA AGAAGATTAT GAGTCATTCT CACTACCGGA ATCTGTTCTT  
CTATTTTNT TACCAATGGG TGCACCAATG AATGTTGGCC ATCAATAGC AAATACCTTC TGCTGTATT TCTACTININ  
GTTTTAACTG GAGCCTCAGC TGAAAAGGTT TATGGTGCTG CTATTCAGTT TTATGAACCA TACTCTGAGG AGAATCTCAC  
AGAAAAGCAG AGACTTCTTT TGGGTTTAAC ATCAGCAGAT GGGAGTCTG ATAGTTCCAA AACAATTCAT ACTAACAAT  
GCATCTGCT TCTTTCTCAC TGGGNTTTT TTTGATGGCA TTCAGGAAGT TTCTGACTTT TNCGTATCG TTAATTCAT  
CTCTGGGGCT CATGCTCTTC CAATTGAGGA GGATAATTCC CA

SEQ ID NO:371: (Length of Sequence = 441 Nucleotides)

GACAAAGTCA CTCAGGGTCT ATTTCACCAT ACCCAAAGT AAAGGCCCAA ACTCCACCGG GGCCAAGINT TTCTGNTICA  
AAGTCACCAT GTCCCCAGA GAAGTCTAAA GACTCACTAG TTCAAAGTTG CCCTGGNTCC CTCTCTCTCT GTGCAGGAGT  
AAAATCTAGC ACACCACCAG GCGAGAGCTA TTTTGGTGTC TCATCTCTGC AACTGAAAGG ACAATCTCAA ACTTCACCAG  
ACCACAGATC TGATACTTCA AGTCCAGAAG TGAGACAGAG TCATTTCAGAA TCACCATCTC TGCAGAGCAA ATCTCAAACA  
TCACCTAAGG GAGGTGGTTC CAGGTCTTCA TCTCAGTCA CTTAGCTTGG CATCCAGATC TCCANTAAGG NCAAGATAGA  
GGTGAGTTCT CAGGAGTCC TATGTTGAAA TCTTGGAAAT T

SEQ ID NO:372: (Length of Sequence = 362 Nucleotides)

GAGGTATTGT TGTACTGGG AGGTTGAAGG GAACACAAAT TCAGTTATAA GTCCTTTTTG AATACTAAGA GGGGATAAT  
TAGGGAGCT AAGAGGGGAA TAATTAGGAG AAGAAAAAAA AACTTCAAAC AATTTCCCT GTAACATGAT TTTACTTGCA  
TTTATAAACT GATTTTTTTT TCTAAGCACT CCTTGATAA TGATTAAAGT TGGGGTTACA TTATTINAGG GTCGTCTAAT  
ATTTAAGGTG ACTTAAAAAC CTCACACAG TTAATCCGA ACTGTGAAA TTTCTCATCT TATCATCCCT CIGTTACTAT  
CAATTTCTCT CAGGTACAG ATTCTTTTAT AATTACTTCA TT

SEQ ID NO:373: (Length of Sequence = 306 Nucleotides)

ATTCTTTGTT GGTGTGTGTG TGIGTGTGTG TGIGTGTGTG TGIGTTTTGC TGTGGAGTTG AGTTTCTTTG TAAATTCGG  
ATATTAGTTT CTGTGTAGAT GAATAGTTTG TGAATATGTT CTCCATTCA ACAGGTGGC TCTTATTCT GTTGATGTT  
TCTTTGATC TGCAAAAAC TTINACTTAA ATATAGTTCT ATTGTTTTAA TTCTGTTTTT CTTACCAAT CTTCTGAGAT

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CITAGCCATA AAATGTTTGC CTAGAACAAT GCCCTGGAGT GTTCCCTG AGTTTTCTTC TGGTAG

SEQ ID NO:374: (Length of Sequence = 278 Nucleotides)

GGGTTTTGGT TGAGGTTTCT ACCTCATTAT CCAAGATATT TNCTTTCCAG CCAGCAGAAA GAAAAAGGAG AAGAGCTGCC  
ACCCTTTGTA TCCAGGATGA TCTCTTNTG AAATCCTTGA TTTAATTATA TCTGCATGAC CCTTTNCCCA ACTAAGGTTA  
TATCCACAGT TACCGGGGGT TAGCACTGGG ACATCCCTTA TTTTANGAAC ATGTCTCAGA AAGTTGCACA AAAAATTCT  
ACTACATCCC ATTGGCCAAT ACTTCTTACA TGATGACA

SEQ ID NO:375: (Length of Sequence = 321 Nucleotides)

GGTGACAGTA TTTTTTGTTG TTTCTGTAGC TCCAGCCCT CAGAAGGGAC GCCTACAGTT GGCAGCTATG GCTGTACCCC  
TCAGTCATTG CCCAAGTTCC AGCATCCTC CCATGAAGCTG CTCAAGGAAA ATGGCTTCAC ACAACACGTC TACCATAAGT  
ATCGTAGGCG CTGCCTTAAT GGTAAGAAGT GTGGGGGCA GGAGATGAGC CTCTGGGCCC GTTATTTAGA CCCAGASTAT  
AAGAGTTGGG GGATACGGGG ATAGGTGACT CTTTCTCTG ACTTCAGAGC AAAAAAAGA CATGACATTA TAGCAAGAAA  
G

SEQ ID NO:376: (Length of Sequence = 337 Nucleotides)

GGAAATTTA CAGCATGACT ACATATGTTA GGAAAAAAT ATCTAAATC AATTAATAA GCTTCCATCT TAGGAACTA  
AAAAAGAAG AGCAAATTAA ATCCAAAGTA AGAAGAAGAA AATAAATAAT AAAAATTAGA GCAGAGAGAA ATGAAATTAT  
GAACAGGAAA TCAATTTTAA AAATAAATGA AACCAAAAGC TGGTCTTTG AATCAATTAA TAAATTGAT AAGCCTCTAG  
CCAGACTAAG AAAAAGAGG TAGGGCACA ATTACTAATA TCATAAGTCA AAGAGGGAC ACCCCTACAG ATCCCATGGA  
TATTAAAGG ATAATAA

SEQ ID NO:377: (Length of Sequence = 455 Nucleotides)

GTTACAATTG AGAAAACATA TTTAATAAAT CATTGTCAAT TTTNATAATG TTCAAGCCC ATTCTTTGTT GATAGCCTCC  
ACATTTATAT GGTTAAGTCA TTGTGCTGT GTTCTTACC TATGACATTA TTTNATATC CCTTCATTG TGGATCTTAA  
GATGTGCAG AAGGTTCAAT CCTGTACCCC AATACAGATT CACTTCCTTT AGCTGCCTTT NCTAGCACCA ATATGCTTTA  
AAAAAAATG CCACAAACAC AAGCAGTGAC AGCGGCCAAT TCCTCGAATG TCCAGATTAA TAACTGTAGC ATGCTAAAGA  
AAGGTGTGTG TAAATAGCTG GAGATGGTAT ATGGTCCAGA GTCCAGCATA AAATTATTTT CTTTCTGAGG CATTCCTCC  
ATTCCCTTAA CCCGATACA TGCAATAGGA ATGTAGCAAA ACCCTTGGG GAACC

SEQ ID NO:378: (Length of Sequence = 349 Nucleotides)

GATGGTCAGG GGTGTTTATT ACTGGACATG CTCTATGCTT ACTTGCTTGA AAACGCTCCA TTAGAAAATN AACTCTGAAA  
ACTATATGCC CAATGCTAAT AGTGGTATT TATTGGTAACT ACTCTTATC AGGTGCTATG ATTGTGATG GCTTTATTIN  
CINCTTCATA TTINCTATAA TTINCTACAAT GAACATGTAT GTATAATCAG ACAAAAAGC CAAGAAATAT CCATAAGTTT  
TNCTGGTCAT TCATTCTATC CATAAATACT TGCTGAGCAC CTGCTGTAAG CCAGGCTCCG AGCGGCTGC TGGGTGGAGT  
GCGCACCCC AGGGAACGGT CAGCCCTCG

SEQ ID NO:379: (Length of Sequence = 421 Nucleotides)

ATTTTGAATC ATATTTTACT TATAGGTTTG CTGTATATAC TGATTAACT TCTGAACCTA AAGATTCTCT ATAATTAAAC  
TAGCACAAAT ATAATCTGTC CCTTACCCAC ATTGTAAGAA TGCTGTGGTG GGGAAATCCA ATATGACCT TCACATTCCA  
CATGGAAAAT CTTTGTCCCC AGAGTGCAAT TAGGGTGATT AAAAATAAGC AGCTTTTGTG AGTCTCAAGT TTGTTCCCCA  
ATCAAGCAGC ATCAGCAACT GGAAATTTGT CAGACATGCA AATTAATCAG TCCACCTCA TCTCTCAGCC CAGATCTATG



171

GATCAAAAAT TTGGGGGTG ACCCTGGGCA ATATGGGCTT TAATAAGNCC CTAGGATGGG TTCTGATGCA TGCTCCAAAT  
TTGNGGATCA TTGAVINCINT G

SEQ ID NO:380: (Length of Sequence = 311 Nucleotides)

ATTTTNAGAT GGAGTCTCAC TCTGTGCCCC AGGCTGGAGT GCAGTGCCAT GATCTGGGCT CACTGCAACC TCCACCTCCC  
AGGTTCAAGC AATCCTTCIG CCTCAGCTTC CCCAGTAGCT GGGATTACAG GCACCTGGCT AATTTTTTTTTT TTTTTTTTTT  
TTTTGAGATG AAGTCTTGCT CAGTGGCCAG GNTGGAGTGC AGTGGTGTGA TCCTGACTCA CTGCAGCCTC TGCCCTCCGT  
GTTCAGCGA TCCTCCTGCC TCAGCCTCCT GAGTAGCTGG GACTACAGGC ATGCACTACC AACTTAGCT A

SEQ ID NO:381: (Length of Sequence = 442 Nucleotides)

AATCTGTGAA CATATATTTT NATTTATCTT AAATACCTAA GAGTGAAATT NTGGTTCAT ATGTGGGTAT ATATTCAACT  
TTGTAGAAT CTACCAAAT GATTTTCCAA GTATATGTAT AATGTTATGG TCATCAGANC TACATGATAG TTAGAGTTGG  
TTAACAATCT CACTGCAATG GATTGACTTT CCTGTGATTC AGCTATCCCA CTCCTAGGCG TATACCCAAG AGAAACTCAT  
AATGTCTTIG TGTGCAGCTT GTATGCTAAT GATTTTAGTA GTATTTTTTG TAATAGCCAN AAGGTGGAAA CANTGAAAC  
TTTCACGGA ATGATTAAAT AATTAACAAA ATATTATATA TCTATATATG ATCCATTAT CAATGAAANG GANTGAAGTG  
GTATACAAGA AACACCACAG GTTAACCNIT GAAAGTATAT TA

SEQ ID NO:382: (Length of Sequence = 337 Nucleotides)

AACAGACTTT GGAGCCANTC CCATGTGAGT TTGAGTCTCA GAGTGACTCT GGGCAAGTNA CTTAGGCTTT CTGAGACTCA  
CTTCTCTCTT TTATAAATCA GGAAGAATAA TCCATTGCTC ATTGAGTTGT TAATNAGACA TAAATGAGAT AGTGTATCTA  
AAATGTGATT TGTTAAGTCT AATACGNAAT AGATGCCTAT TTGAGTGTTC CTNATACTCA GGATGGTTCT TGGGATATAT  
TTNCCCATGG AACAAAAGC AGACTACTCA TGACCACTCG GATTTTATGT TCAGCCACAT TAGGGCTCTT ATGGCCTGAC  
CTGAAGACCT ACCATTT

SEQ ID NO:383: (Length of Sequence = 421 Nucleotides)

GTGAAACTGA AGAAGACCAC GACAAACGAT CGCTCAGCCC CTGCTTTTC TTAGGTTTAC AAGAAATGCG CCGGTGGGGA  
ATGAACINTT TCATTAAATA AACCTAATTT GTCTTGATCC ATTCCACTCT ATAATAAAC AAAAGATTTT NTAGGCAACT  
CGGAATATAG CTCTTTTGAA AGTACTOGAC ACCTTTAGAT AAGAATTAAA ACCAACCTAT GTAACGACA TAATCTTGAT  
CINTTAATTT GTAAATATTG ACANTTINCT TTCTGCACAT TTTAATCTTA GTTTCCTTT TGATTTINCT GAAGGTGCCA  
AATTCATTT AACINCITTA CAAGTCTTTG TAAAATTTTA AATGCATAAA GGGGGGTTGG GGGCAGGGG ACCNCGGANG  
TAGTTTAATT TTOGGAAAGG G

SEQ ID NO:384: (Length of Sequence = 420 Nucleotides)

GGACTCCGTT CCCAAGAATA AGTTTTGCTT GGGCGGAAAG TATGTGGTTC ATCGAAAAA AAAGAAATCA ATGATTGTG  
GCAGTCTTTC ATGTGCTTTT GGGCAATTC ATATCTTCT TGGAGAAATA TCAATTAAGA TCCATTGCGG TATATACATA  
TATTAAATTT ATGGGTCATG TATTATGGCT CATACTGTA ATCCCAATGC TTTTGGATGT TGAGGCGGGA GNTCACCTG  
AGGTTAGGAG TTCGAGACCA GCTGACCAA CGTGGTGAAC CCTGTCTCTA CTAATAATAC AAAAGTTAGC CAGGCATGGT  
GGCATGCACC TGTAGTCCCA GCTACCCAGG AGGCTGAGAC AGGAGGAATT GCTTGAACCC ANGAGGCAGA GNTTCCAGT  
GAGCTNAGGA TTGTGCCACT

SEQ ID NO:385: (Length of Sequence = 404 Nucleotides)

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GTGACAAATG TTAAGAAATT GTGTGTCAAG CAAAATACTT TAGAGGCCAA TGGGCCACAT GTTTTTAATA TCAAGAGATT  
 ACACACAAA TTINTTTTCT AGCTTCTTTT GAAAAATCAG AATTGGGAAG ATGTATTCAT GAGTGACTGC TGCCCCCTTT  
 GGTGGGACT CGTTCCTTCA GGTTCATTAC ATGGTCATCA ATAACCATTT CCTTGGTCCC TGCTTTTGTC TTGTCTGNC  
 TCTAAGCAIT TGAATTTTIA GTATTATAAG AAAACTTAAT ACTTINCTAT CAGTCACCAC ATACATGTGT TTCTATCTGT  
 ACTACGNCIT ATTAAAAGCN TTTTATCAAT AGCNCCAIT TTGGAGGGGG GGATTTC AAC TGGTGCTING ACTAGCAAGG  
 AATT

SEQ ID NO:386: (Length of Sequence = 267 Nucleotides)

GTCTGTGGA CATTTACGTG GTATCTTTAG AGCAAACACA GAGTGGTTC ATAAGCTGCA GTGTTTLAGT ATCGGTGGGA  
 CTGTGGCATG GCGTAGAGGA GTACAGTCG CAACTGATG GCCAGCTCT GACCTCCAG GCAAGTGGAC TCCGAGGAGT  
 ACCAGCAGAT CTTCCACAT GCGTCGGGA GGGCTCTGGG GAGAGTCAGT GGCAGGAGA GGTTCAGCTG TGCAGGCTCC  
 AGGGCCAGC CCGTGCTTT CCCCTCT

SEQ ID NO:387: (Length of Sequence = 384 Nucleotides)

ATTTTAAATG ACATTTTATT TAGGCCAGGG GACCAGGTAA CATTTATTTT AGGAGGAGAG CAAAAGGTGT TATATTACTG  
 CTCTAATTA CCTAGAAGGA AAGCATTTGC TACACTGCCA TTATGATTGG CTGCAGCAGT TCAACCTGGC TCTCGGAATC  
 TGCCATTAGC TTGACAGCAT ACAGAGCACC ATATCAGGGT TACTATGGGA AGACTCTATT GTGGCATCAG AAACACAAA  
 AACACTGGAT ACAGTTAGTT TCTGTGACA GTTTCAGAAG AAAATCCAC AGATTGGACA GGCTGCCTGC TGAAAGGGTT  
 GTCCTACAC ACAGCATGCC CTGAACCTG GGAATGAAGT TACCCCTATC TGTGGTGATC AGGA

SEQ ID NO:388: (Length of Sequence = 345 Nucleotides)

CTAAGATCAA ATGCAGGCAA AAGTGGTGAA TTTTACCACC TGTTTGTAAG TCTGGGTTTA TAACTTTACC GTAAATCACC  
 TAGAACACAG GCTAGCCGAA TCGGGGTGTC TGGTATGSCA ATATCCCGAG AGCTAACCTG GGGCTGGGG AATGTTCTGT  
 GGCTGCTGCA CTTGCCTCTA ACAGGCCAGT TTAAACGTC CAGCTCTCAG GGCCACATTC TCCAGGACAC AGCAGGGAGC  
 TCACAGTAGC TCAAGACCCG GCCAGCCTC CATCCCAGC CTGGAGCTG TCAGTGCTCC CAAAGGCTGA AAGAATTCGG  
 TCTTGGCTGA GTGGACAGCC CCCTT

SEQ ID NO:389: (Length of Sequence = 156 Nucleotides)

TAACTGCCC CAGCAGTGA TGCAGGAAGA CTCTCTGGT CATGAGGTGA CCAATCTGCC GGTGACAGAA GNACTGATTG  
 AGCGGGAGAA TGCAGCCAG CTCAAGAAGT GCGGGGAAC GCGGGGGNG CTGAGTATC GGCCCTCAG GCGACT

SEQ ID NO:390: (Length of Sequence = 364 Nucleotides)

GAGTCTCGCT CTGTACCCA GGCTGGAGTG CAATGGCATG ATCTCGGCTC ACTGCAACCT CCGCTCCCG GGTTCAGTG  
 ATCTCCTGC CTCAGCCTCC CGAGTAGCTG AGATTACAGG CAGTGCCAC CAGCCTGGC TAATTTTGA TTTTCAGTAG  
 AGATGAGGTT TTGCCATGTT GGCCAGGCTG GGCTCAACT CTGACCTCA GATGACCGC CTGCTCAGC CTCCCAAAGT  
 TCTGGGATTA CAGGCATGAG CCACTGCACC CAGCCCAACA CTGGGATTCT TTTATCCGCT GGCTGGCTCT TCCGAGTTG  
 AATTGTGTA CTCTTCCCC TATCTGAGGC CCAGTTTTTC TTCA

SEQ ID NO:391: (Length of Sequence = 325 Nucleotides)

GAGTGTCCAG ATGATGGCAG TGATGGCCCA TCTGGAGCGG CTGCTGTAAG GACTGTGGT GCAGCAGGGG AGGCACAGCC  
 AGGCTGCGC ACTAGGCAGA GCTGGTGTGG GAGCCAGGAG CAGATGAGAG CCGGCCCTC TACCAAGTTG GCACTGCAGA  
 AGGCGTACT CCGGGTGCT GATGCCGAGT TCAGTCCAC ACCCTGGAT CCTGGGCTN TCAGGCGCC AGGAGCCCT

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CCACCCCTGC AGGNTTCAAA GGGCCTGCTT CCCACTCCTT GGCTTTCCC TCCTCCTGGG AACCAATCTG GGGCAGAGCA  
AAGCT

SEQ ID NO:392: (Length of Sequence = 371 Nucleotides)

ACATCCACAC AAGTACAAGA ATACAGAAGC TTCTCTAGTC AGGATGCACT AAGCACCTAA TGAGTAAACA AACTTCAGCA  
TATCCTCATT GTTCTCATGG TATTAATTG AAGATACTTA CCTTGAAGT AAATCTGGT TTAGAAGAGC TGCTTGTTGT  
TCAGCTCCAA CTGGTTGGGA TACAGGCTGT AAACAGTACA GACATAAAAC TTGCTATGAT AACAGTAAAA TTCAAGCTAA  
ATATACAATT TGTTACTATT CAGAAAACAC GATAGTTTTG GTTACCTTGC AAACCTGGTA GGAATATCTA TGTTATTGAA  
TGTCGTATC AATCCTATTA TTAACATTAT TACCAAAGGT AAATAAAATT T

SEQ ID NO:393: (Length of Sequence = 404 Nucleotides)

CCTTTTAGTA GCTTCTCTGA GGTAAGACCA CTCTTTTTG ACCATCTAGC GCATCTNTC TTTACATCAA CCATTTATTT  
CAAGTGTAGT GTGCTTCAGA GTCTGAAAGA GCTATTGCAG AATTGGCTGT TGTGGCTTTC TATGGACATT CACATGAAAC  
CTGTACAAA CAGTCTCTA GAGACAACTT TGGGTGGATC CATGAACCTT GTGTCTAAAC TGATCCACTA TGTAGGGTGG  
CTATCCACTA CTGCAATGCG CTGGAGAGC AACAACTCT TCTTGCTGCA CTTTATTTTG GATTTCTATG AGAAGGTGTG  
TGACATATAT ATAAATNATA ACCTTCATT AGTGGGTATT GTTCTCTCT GGGATCCTT CTATTCTGCA CTCTCAGCC  
TGGG

SEQ ID NO:394: (Length of Sequence = 416 Nucleotides)

GCCACACACT GGAGAGGGAG AGCTAGAGAG TGAGACAGCA GGGGAGCTGA GGTGAATGG CTGCTGTTAG AAGCCCTGGA  
GACAGCCTGA GGTGAGAGCC CAGCCCACT CCTGGCTGTG TGATCTTGAG CAGGGCTGTT AACTTCACTA GGACTTGGTT  
TOGGTTTCTC ATAGAGAATA GGTACAGTGT GAATTAAATA TATATAGCTT GAATAAAGTG CCCAGCTTGT GGGTAGCTGC  
TGCCATCATC ATCACCATCA CCATCATCAC CATCACCATC ATCATCATCA TCATCATCAT CATCATCATC ATCATCATCA  
TCTCAGGCAC AGGGGCTTTA AGGACAACAT GCCAGTTTA AGGANGACA CAACTCTCTT CATTTATAGC GNCCTCCAT  
CAGTGAGTAG ACGCTT

SEQ ID NO:395: (Length of Sequence = 315 Nucleotides)

AGAGATCAAA TGCTTTAAAC ATTATGGAAT AGGAGTGTAT GACTGACTAA CATCCAGTAA TCATTAGGGA AAACAAACAT  
GAGTGAGENC AACTGAAATA ATTATGATAC AATTAGGGT GGTAGGTAC ATTTGTATAG TTCTTTAAAA TATGCATTAT  
TOCATATGAT CAGAAATATA AAANGANCTA GACAGATACT GGTAGAGAGA CAATTAATTT AAATTTGTAA CATATTGCTT  
GGNGCAAGCA TTCAAGTTGA GTGCTTAATG TGTATCGGTG ACTGCACTGT GCAAATAAAT TTGGGGTTAG TAAGA

SEQ ID NO:396: (Length of Sequence = 409 Nucleotides)

CTCCAGTTCT CAGTTAGGG TGCTTTCTTC CCGGCAGAG TTTTTOGAGC TCATGAAGGT GGACTGCCTG GAAAGTACTC  
TAGAAAAGTC ACTCCAAGCA AAGTTTCCTT CAAATCTCAA GGTCTCCATT CTCTTAGACT TCACGGGGG CTCACGAGGC  
CGGAAGAACT CCGGCACAAT GCTGCTCCCA CTCCTGCGGA GGTTCOCAGA GCAGGTCCGA GTCTCCCTCT TTCACAGCC  
GCACCTCGST GGGCTGCTTC GGCTCTCAT CCTGAGCGC TTCAACGAGA CCATCGGCTT CCAGCACATT AAGGTGTACC  
TCTTTOGACAA CAGCGTATC TTGAGCGGTG CAAACCTGAG TGACTCTAC TTINACCAAC CGTCAGACCG NTACGTGTTT  
CTGCAAGGA

SEQ ID NO:397: (Length of Sequence = 414 Nucleotides)

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ACAAGCTGTG TGACCATAGG CAAGTTTGAC CTTTCTGAGC TGCCATTTTC TCATGGTAAA AGAGAGATAC TAGAGGAACC  
 TGCCTCACAG GATTGTGATG GAGAATAGAG GAGATGATAC AAGTGAAGCA CTAGGCAGCA CCATACTTGG AACTAAGGGA  
 AAGCCCCGAG TCAATGTTCA GTATTGTTAC ACTTGCCAGA TTGTGAAAGA GCGCAGGCAA CCCTTGAGTT GAGCTCAACG  
 CTGGAGCCAA GATCAATGAC AGAAGGATTT TGTTTTGAAA CAGCAACTAA TGACCAGAGA GAGGAAATGG GTCATGAAGC  
 TCCATGGTGC CTTTCATGAA AATGAAATGT AAGGGCGTGA TTCAGGAAAA AGGGACCACG ATCAATACCA GCAGACTCTT  
 CCTATGCAC TGGG

SEQ ID NO:398: (Length of Sequence = 400 Nucleotides)

CATCAAGCTG GGAATGCCCT AAAGTGGGGG CGTGAGGAAG AGAAGGGGTG ATACCTAGAG GCTGGGGTAT CTCTGTCCCA  
 AGGAGACAAA CTATAACAAG ACCCAGCAAC TGAAGGGTTA ACACCTAGCA CAGACGTATA CCTCCAGGNT CCTAGCTGCA  
 TTCTAATTC TGCTTCATCT ATGCTTGAGC ACTACTTGTT GTTAAATATA CTTAATATCA CTCTTAGCTA ATTTCTCTA  
 TGTAGATTTT TATTTATTTT TGAGGGCAAC CCAACTTCCA GGCTCTTGGA AGGAAATAGA CTGCAGCCCC TAAGTGTGAT  
 CAATACTTAA TTATAACAAT AATCACTAAT AATACTTGT GCTGCTTCAT TGTAACATAA ATGTACACTT TTACATTTTT

SEQ ID NO:399: (Length of Sequence = 324 Nucleotides)

AAATATTAC AATTTTACAC CTTCAGGAAG GCTCCAAAT ATAAACACTG TACCTCTCCC TAGAGAAAAA AAAATTATTC  
 TTCTCTCAA AAACAGGAAT ACATTCATTT TTTCTCACTG TGTGAATCAA GTAATTATAC AAATAACAT CTGAAACATT  
 TTCCTTTTAA ATATATTTAT ATAATATATA TTINTAACAG CTTTACAAAT AAAGGCAACG GTCCTTTTCT AATTTTCATG  
 CCTCTCAACA GAAGGGTACA TGATGCTCCC TGAATCCAG GGNTATTTTT TNCTCTCTAT GGTACTTTGT ATTTCACTTT  
 ACTT

SEQ ID NO:400: (Length of Sequence = 388 Nucleotides)

ATTAAATCTG AGTTTTGTTT GAGCATCTTT CAACATGTAC CATATTTATG ACAATTCCTT TCCATAGGAT CTATCTGTC  
 TGCAACAAGT ATGTATCTTA CAGTAAATTT TTTCACAAAT TCATTAGATT CTATGTCCTT TTTCTGTTA GGAATTTTTG  
 TGCAGGTAGC TATCTCTTGC CCTAGATTAT TCTCCTTGTT TAGCTGCTGA TTCTTAACT GGCTCTTAGA TTTCCAGATT  
 TCTTCCGGTA CAGACTTTCT CTTTGCAAGT NCTTCCATCT CTAATCTTTG AGATTAACT TCTTTTGAAA TGTCTGCTG  
 CTCTACTCTT GTATGTCCTG GNCCACGTT CAAGCTTCCC ATCTAGCAAA ACCAGGGTTT CTAATATT

SEQ ID NO:401: (Length of Sequence = 339 Nucleotides)

GTTTATGCT CAAAAACAAG AATCAGAAG CAAAGGTGGA GAGACTGTGG GTTGGGGAGA TGGCAGGAAG GGGCAAGGC  
 CTTGTCCCAG CTCTCCCCTT TGTCTTCTT CTGACCTTCC TGGCCGGAGT CAGGCCTAGG GCCAGGGCAT CTGGGAGGGG  
 GGCACCTTCG TGCCAAGGG AACAGTAGAG CTATCGGGG CAGTCCTTGA GGGGTGCCCT GGCAGGAGG GGCTGCAAGA  
 TTINCAGGGA GGCAGAGTTC CCTTCCAGA ATCCAAAAGC CGGTAGGGCG GGGGGCAAGG CCCCTCGTTT GGCAACTNAG  
 AAGAGGCGGC TTTTGGGCG

SEQ ID NO:402: (Length of Sequence = 400 Nucleotides)

TGTCCAGTGT ATGAGGACGT CCCAGCGAGA AATGAAAGGT TCTATGTTTA TGAAAATAAA AAGGAAGCAT TGCAAGCTGT  
 CAAGATGATC AAAGGGTCCC GATTAAAGC TTTTCTTACC AGAGAAGACG CTGAGAAATT TGCTAGAGGA ATTTGTGATT  
 ATTTCCCTTC TCCAAGCAA ACGTCTTAC CACTGTCTCC TATGAAACA GCTCCACTCT TTAGCAATGA CAGGTTGAAA  
 GATGGTTTGT GCTTGTGCGA ATCAGAAACA GTCAACAAAG AGCGAGCGAA CAGTTACAAA AATCCCCGCA CGCAGGACCT  
 CACCGCCAAG CTTTCGGAAA AGCTGTGAG GAAAGGGAGG AGGAGGACAN CTTTCTGAC CTTATCTGGG AGCAACCCCC

SEQ ID NO:403: (Length of Sequence = 416 Nucleotides)

AGTIGACTGC TCTGATATGG AGAGACCTGT TAGTCTTGTA TATAGTGGCC AGCCGGAAAA AGCATCTCTT GAAGGTTAGG  
GCATTTTGTG AGGAGAGCTC TAGGGCTATA TCAGTCTGGA GGTATGATCT CTGATAAAGA TCATAATTCT CATCTCAGTA  
ATCTTCTTTA GAACAAAACA TTCTTCATTG TAAGCTTCTC ATTAACTGAA GGCCACCTGA TCTGAGATTT TGGCTCTTAG  
AATACTCTTT NCTGTGTCTC AATCCTCATA TGGCTTACCT CTGAAATATA GAATATATTT CCTTGTGTAG CCTGGTAGAG  
TTGGGTTTTG TTTTGTTTTT CAAACAGTAA CTTTATTTG ATTGTAAAC TTCCAGATTT CTGAGATGCC GCCTTACCAG  
TCTTAAGGTT GATTTT

SEQ ID NO:404: (Length of Sequence = 368 Nucleotides)

CCTCTNACTC ATTGTGATGA GTAGGGCGGA GGGCTTCACT GCCTCANITT CCCCACTTT GGACCTTAA TCTCTCTCTG  
ATGCCTCTCA GCCCAGCCAG GAAGGAGAGC TAAGACCAAG AGGGATTAA CAGATGCAGG ACACACAGCC TTGTCTCAG  
ACCCCCAAG TCTGAGAGAA GCAAAACACT CACCTTGAGA GCCCTGGAC TTGGAGGTGA GGTGCAGAAC CCAGGCTGGG  
TGTTGTCTGA GGGGTGGTGG GGGTGGGTGG TGCTGGGTGG CTGGCTGGG AATACTTTTC TTAAGCTAAG GCTGGGGCTT  
AGGGGAGGGC CAGAGGAAGG GTAAATAGTT TGCCTGGGGG GGTGCTGG

SEQ ID NO:405: (Length of Sequence = 395 Nucleotides)

GACAGGTCTT CACTCTTACC ACAAAGCTCA AGTCAGCTTG GCCTCTCAAG TGGAGAGATA ATCGTTCTAT AGCAAGAAGT  
ACAAAGATT CTTGCAGACA AAACCAGCTA GCCAAGGTT CACAACATGT GTACACGTAT AAGTCTGNTG GATCAGAAGA  
AATATGTACC CGGGAATCAG ATGTAGCCAG CCCACATACT AACAAACATC AAAGCAAGCC TAGTCAGATT GAGTCCCAIT  
TGAACATCT TTATAAAGGT TTCTTCATGT TATTTACAAT TCAAAGTAAA TTTACTTTAT AAGCAGCTAG GGAATTCTT  
TATTTAGTAA TGTCTTACA TAAAGTTTC ACATAACTGG CTTCTGTCCA AACCATGGAT ACTTGAGCTT TGTGG

SEQ ID NO:406: (Length of Sequence = 358 Nucleotides)

GATACCTTAA TCTAAATTT ATCTTAATTT TTATTTTAT TTCAATGTCT AAATTTTAT CTAAATTTT TNCITAGCTCT  
TTATTACACC AAGACAGCTT CACATTTTTA TTTATATAT GTACATCTCA TGTAAGGNAT TACCGTATAT AAGCTAGTGT  
CATAACTTAA GTAGCCACAT TCATTGAGTA TGTMTTATGT TTTCTCTCTG ACTGGATCTC TGATACATTC TTTCTGTTC  
TAGCTGCTTT TATGCAAAG GCATTATAT GTTGTCAAT CAACCAGGCT TCTGTGACTG TTTAGAAGGA ATTATGTAA  
TATATAATCC NGTGGCCTGT TTCATTTGG CCATGTTT

SEQ ID NO:407: (Length of Sequence = 294 Nucleotides)

CTGTGTATAT TTAGTATCTT TNATTAAGAA GACTGGTGA TATTGCGCT CAGCTAATTT ATAGAAAGGA TGATCATCAA  
TGTCTCTAGT TTTCTTCTAA GTGGCTTGTG TGTGCAGGTA CATATAAAA TNCAACTATA CAAATAGCTG GACAGTTGAG  
TCTCAACTAT GAAATCTTT TCTGGGATCA AGATCTAAGA AGTTGGTGTG TGTATGAGTG CAACCCATCA TTCTATCCCC  
TAAAAATCTG GGGTTTCTCA GCCCAAACAT TNCCTAGT AAAGTCAAGT TTCA

SEQ ID NO:408: (Length of Sequence = 367 Nucleotides)

GGCAAGGAAA GAGAGCTTTA AATTGAAAGG TTAATTTCTT AAGAGGAACC TGGGCTGAAT GACTGCAGTG TTATACCTC  
CAATCTTTGC AGGTGGGCAT GGAACACTGC TTGTATCACT CTGTGCACGG TATAAATCCA TATATCCACA AAAACACACA  
TCCATCCATC AACATATACA TGGTTTGGGA TGAGCAGGTC AATAGTTTTG AGAGGGAGTT TGTTCCCTTT TTTTCTCAT  
TATACTCTTA AATTGTGTG AGTTATCAAA CAAACAAACA GANAAATTGT TTGGAAAAAC CTGTGATACG CCTTTCTCTA  
TCAAGTGCTT TAAATATAG NCTAAATACA CACAGGCTTG AGGCAGA

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SEQ ID NO:409: (Length of Sequence = 233 Nucleotides)

AAGAGACAGG GNCCTATTCT GTCAACCTGG CTGGACTGCA ATGGTGTGAT CACAACCTAC TGCAGCCTTG AACTCCTGGA  
CTCAAGCANT CCTNCCACCC CAGCCTCCTG AGCAGTTAGG ACTACAGATG GGTGCCACCA TGCCAGCTA ATTTCTAAAT  
TTTTTTTAGA GACAGGGTCT TGCTATATTA CCCAGGCTGG TCTCAAATC CCTGGGCTCA AGTGATCCTC CTT

SEQ ID NO:410: (Length of Sequence = 295 Nucleotides)

GACAGGGGGT GGGGAATTCT ACTCCATGGT ATCTTCAGAG CTAGGATAAT GCTCCTTATG CAATCCCACT GCATATGACC  
ATGGCAGTAG AACAGTTCA ATTACTACAC TGGATGCGTT AAGTGTGCTT TCCTAGCAGA AAGCACCAGG GTGGAGTCAA  
CAGTTCACAT GCTAATACIT GGAAGTATTT CTAGAAGGGG GTGCTCAATA GAGGGCAGAC ATGATGCAAG NNCTTCATAC  
TAGAAAGGTG TCCTGTGTGT GCATGCACAG CTGGATGGGG GCACACAGGA GCAAG

SEQ ID NO:411: (Length of Sequence = 304 Nucleotides)

AATAAAAAGA CCATTAACTT AAAGTGGTGT TAAATGCTTT GTAAAGCTGA GATCTAAATG GGGACAAGGC AGGTGGAGGG  
GAGGCCAGTG TACATGTAAA TGCCACAGC CCAGCATTGG GTTTCCTCC CAAGNCCCA GCACCAACCT CTGAGCCCAA  
GACCTTGCTT GAAAACAAGC AGATACCGAT TGNITCATCC TATTTATGGA CATGTAGGTC TAGTTGCATT TTCACTNGGG  
GGAGGGGGGA AGGTGAATTA TGTAACCTT TAATGATCTA TTCAGGCAGT AGAGCTCTTA AGGG

SEQ ID NO:412: (Length of Sequence = 250 Nucleotides)

CAGGTGCGCA CTATCAGCC CGGATAATTT TTTTGTGTTT TAGTAGAGAC GGGGTTTCAA CATGCTGCTC AGGCTGGTCT  
CAACTACCGA CCTCGTGATC CGTCCACCGC GGCTCCCAA AGTGCTGGGA TCACAGCGT GAGCACCNT CTGCGNCACA  
GGINGAGACC CTTTCTATAT AAGAAAGAGA AAAATGTCTC TNANTCACA GAGAATGCTA ACAACGGGG AAAGCACAGA  
CAAAACCTG

SEQ ID NO:413: (Length of Sequence = 337 Nucleotides)

GTACTGGGAC AAGGGAAGGC AATCACAAAC AACTGCCCTC AGGAAGAACT CAGTCCCTGA CTGTAGTGTG TCTTCGGGGG  
AACCAATGCC ACCCNCCTCC ATCCCCAGA CGGGCGAGGG GCTGCACCCT TAAAGCAGGC CATTTGGGCT TCCGGGCTCC  
AGGGCCAGCC CACCCCGTTC CCCTGGTGG ATCTTCTGGT GCTGCAGGAG GTGCTGCTTC TGGACAAAGC TCTTNTCACA  
CTCAGTGCAG CTGTAGGGCC GNTCACCCTG NTGGATGCGC TGGTNCAGNA CCAAGTCAGA TGGGTGACTG AAGCTCTTGC  
CACAAGTAAC CACAGAT

SEQ ID NO:414: (Length of Sequence = 304 Nucleotides)

GGTTTAAGAA CTGCGTTTGG GNGCCCAATC TTTGGTGAAA AATATTTTGG GGTTCATCTT GAAAAAATC CTTTCAAGG  
CAGACAGCAT TTAAATGCTT TGTCTGTTTT TCCCTGTTTG TCAGCTCTGN CACCAGCCTG AAAGATTTAA AAATNCAAAT  
TAATGGAGGN TTATTTGTCC TMTACTCAGG TCACATTTCT GGGTTTAAAT GAAGNGACAG ATGCTGCTCA TATACAGGAT  
TTAGCTGCAG TTCTTTTGA ACTTCAGAT ATTCTGAATT CACTCCACTT CTGCAGTCTA AATG

SEQ ID NO:415: (Length of Sequence = 315 Nucleotides)

CGTTGTGGAG TGGGTGTCTT TGGATAGAAG GAGTGAGGAA CTGGGGGAGG AAGGCCTGGG GGATCCCCTG GCGGGGCTAC  
TTCTGGGCC CGGNATGGAC ACCTGGNAGC TGCTGCGNTT GTTGGGGTCC TGGCAGGGT GTGGTGTGGC CCTCACCCT  
CTGNTCACCT GCTCCTTCTT NACAGTGCCT GGAGAAGTTC CCTGTNATCC AGCAGTTCTA AAGTTCGGA GCTTCTGCC  
CATCCATCCT GTCAGTCCGG GCTAGGAGGG GNCAAGCCGA AGAGCCACCC ANGNACANT TCCTGTGCTT GCCTT

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SEQ ID NO:416: (Length of Sequence = 343 Nucleotides)

GTATTTCAAG TGTTTTATTT GCTTTCTGTG GTGTCAAATT TGGGGTCTCC TAGAGCCCAG CCCAGGCAG AATCCGGCAT  
 ATCCTTCTCC GCGTGGGGG CCGGGACAC AGGAGTTTCA GAAAAGGCAC TGGCAAAAGT NCTAGGGCGG GGGTCAGGGA  
 GAAGCCACAC TGAGCCTGGA GGGACGGGC CCTCCTTGG CGGCAGAAAA CACAGTCACC TTINGCAGGG AAGGGTTTTT  
 NOCTAGAAAG AAATTTAAGA CAAGATAAAA ACCTGAGATG TTAGAGGAGC CCCAGGAACC AAGCCGGTGC TNCCTGGGC  
 AANCAGAGAG TGAACCGGC TTT

SEQ ID NO:417: (Length of Sequence = 202 Nucleotides)

TATTTCTCTG TGAAAAGGG GAAAATAAAA GGAATAAAT AAAAACGGCA CAGTTGACAC ACAAAAAAA ACCAATGATG  
 GGGAGGACGG GAGGTGGAGA AGTAAATGGG GGAGGGGNTC CCATTACAGC AGCAGGATCC AGTACCCCGG GATGCTCACA  
 TCTNTCCCTN ACGTGGGGG TGTAGCCCT TCTCCCAAG GT

SEQ ID NO:418: (Length of Sequence = 299 Nucleotides)

CACAGTTGG CTGCAGAGCT GTCTTCAGGA TCATAGGCCA CTGCCAGAGT CTTGGAGAGA GGGAGAGATG GAGAGGAAGG  
 GAGTGAGCTT CGGTGGTCTG ATTTCTGGCT CAACGACGCA GGAACCTCAG GTTCAAAGC AGCTGACAAG AGCCAGAGA  
 CCGTCTTCTT GCGTCCGGC AGAGCCTTCT GTGGCCCGA CCCCCAGGCA NGGAGGGAAG GCCCTGAAAT CCGTTTTTN  
 TGGCAAGATT NGTTTCCAAG AGGAGATAAT GGTCAATTT GTCTTCCCA AGTTGATCA

SEQ ID NO:419: (Length of Sequence = 223 Nucleotides)

ATTGTTGGGA AGGTACATT TTCCATGGT TTINATTTN CCCAAAAGTA TTTATGTATT GATTIATTTG GNTCTGACTC  
 AGGCGACGTA CTGTAAGACG ATATTACTTT AATCATCTC ACATCAGTAT TTATGGAATA GCCACAGGTG CCTCATCCTT  
 TAGTAGGAGT TAATTATACA TTINCTGGCC GAGTAAACAT NTCGAATGG TATGTATGTA TTT

SEQ ID NO:420: (Length of Sequence = 406 Nucleotides)

TTTAAATATT AAGTTAAGTA TATAACTTGC CCTATGCCAT ATTGCCTTAA TCAGGGGACT GAGCATCACA TTTAGATTTG  
 ATAGTTTGG GAAAAGTTCT CAAACATCCA GACCATGGA CCTTAAGAAT TACTGCAGAA ATCTCCTTCA ATATAGTCAT  
 AGGGAGCAAT AATGCTTTTG TGGTACTAAA CATATTTT TGCTTAGATA CAAATCCTTC TTGTCTGAA CTGATAGGGT  
 AGGAATGTG TAGGTGCTTC AAATCCAGAT CTTTCAGGG TTGCCACCTA AACTCATCTT TATGAGTAAC TCTAGATAAT  
 AATACACTTT GGTATCTTCC AAGTGCTTA TCTAGGCATG GAAAAGTTCA GTAATTATCA TGAGGNCCTG TTTTATAGTT  
 AGGTCC

SEQ ID NO:421: (Length of Sequence = 281 Nucleotides)

ATCCAGATTA CTGACTTGTA CACAATGGAC CATATGINCT GTCCAAAATA CACCTACATT AACTGTGTG GAACANGAAC  
 CTGGGCTTG CAAAAAGAA TTTATGATTA AATGTAAAC CCCCCAAA AAAAATGAAG CTTAGAAITA AAGGTAGCCT  
 TTTAACCAGA TTGTTACCA GNTGTAAAA TTCTAATATG GGTCAATTAAC TGTTCACAA TAATTCATAT TTGNCCTAT  
 GGTTAAGGG CTCCAGATTG AAAAGGTGCT CTGAACCTCT G

SEQ ID NO:422: (Length of Sequence = 220 Nucleotides)

TTGTATTTT TAATAGAGAC GGGGTTTTGC CATGTGGCC AGGCTGGTTT TGAACCTCTG ACTTCAGGTG ATCTGCCTGC  
 CTCGGTCTCC CAAAGTGCTG GGATACAGG CTTTAGCACT GTTCTTCTG GCGTGGCTGG CTGGCTGGCT GGCTTCTTT  
 CTTCTCTTT TCTCTCTCT TCTCTCTCT TCTCTCTCT TTTCTCTCT CTTCTCTCT

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SEQ ID NO:423: (Length of Sequence = 391 Nucleotides)

CTGCTCTCTTA TCTGGGCAAG CTTTAGACAT ACTAGCTTGG TTGGAAACTG ATATTAAAAG CCTAAAACAT GTAACFTTNC  
 TTATCAGGTT ACTATCATGG GGAAGTAAAG ATTCTCTGGT TTTTGTATGT NCCATAACTA TACTTTAGTA AGCCCTGATA  
 TACGGTGTTA ATTTTCTTNC AGTGAAGGAA ACATGAAGAT ATATTTATGT GCACACATAC ATATATATGT ATATATAACG  
 TATATTCAAA CATGCACTCA GAGGAAGTTA GGGAGAGAAG TTCTAGCTA AACATGATCT TGTGAAATTC TTCCATATGT  
 GGAAAGTCTG TCAGTTCATC TGACATAGAG CAATACCATA CATATATACA CACAGGGTGC TATGGTATAC A

SEQ ID NO:424: (Length of Sequence = 379 Nucleotides)

TGGGAGCCT GAGGCATGAG AATCGCTTGA GCGCTGGGCG TGGAGGTTGC AGTGAGCTGA GACCCGTCCT CTGAAGTCCA  
 GCGCTGGTGA CAGAGCAAGA CTCTGTATCA AAAAAACAAA CAACANACA AACAAAAAG CCTATTATAA AACAAATAGGA  
 AATGCTGAAG TCTAGTGCAC CAAGACATAC TGAATTTCAA ACTAAATAAA TTAAAATTAT CATGTACATT CCACTACATG  
 TCAAAACAGG AAAANCCATA GTATTATAGT TGATATGAAA TGANGATTAC ATACANCAGT AATACAGAGN AAACATGAAG  
 CTGCTTATAT TTATTTGGGN ATAAGGNCAN CAGGGGCCAA TGATTTTCAC TGCAGATGT

SEQ ID NO:425: (Length of Sequence = 448 Nucleotides)

TCCACAGGCG GCGCTGGGCT CTGGAGATGG GCGCTGGGCG CACGGGACGC AGATGGGGCC ACGCTCTGCC CGTGGCTGGC  
 CCAAGTTCTT GGTCTGCAGT GCTGCTCTCT CCGCAGCACC CCGGGGCGAC AGAGGGCAGG GTCACAGCTG GGAAGAGGTG  
 GGGGGTAGAA ACCAAGGCTG GCAGAAGTNT AGCCGGGCTC CCTGATAAAT GCTGGAGGAC CCCAGGGCAC CTGCACCTAC  
 TGTACCTCT CTGAGAGCAT TTGTATGATC TCATGTCTCA GCTCTNNGAG GCTGGAGGTC CCAGAAAACC AAGGTATGGG  
 TAAGATTGAG TCTCTGGGTG AGTACCCAGT TNCCTGGCTC TAGATGGGCG CTTTTCCTCT GTGTGTCTCT AAATGATTGG  
 ATGAGGCCAG GGTGCTCTCT TGGAGTCTT TCTGTAAGGG CAAGTATG

SEQ ID NO:426: (Length of Sequence = 417 Nucleotides)

GCGTGGNTCA TCGCTGTCTT TTCTCTCTTG TCAGAGTCAG TGACACTGAC ATTAAGGTCA TCGAATATCA ACCAGGTCTT  
 GAGGACCTTG GTGTGTCTTC TCTCTCTCTA GTCTCCAGAC CCCAGCCTGT TCATTCCTGA GCTTCTCTTG GCACCCCTTC  
 CTTGGGGCCA AGCCAAAGTAA GAAATCAGCA GGCCCAAGGT GGTGCTTGGG AGGCGGGGCG AGTGCCAGGG GCAGTCTCTA  
 TACCATCTCT CCACTGGCTT CCTCTCTGCC TGCTCTTAGC CGCCACACAT ATCTCAGCTG TCGAATCCGA TTAGGGNTTC  
 TGNCCAGTGA GCCAGACAAG GAGGCCACTN GGCAGGGGAG AGAGAGACAA GGACGCCAAG CAGGGATTGG CAGAAGGAAG  
 GTGGAGACAT GGCTCAA

SEQ ID NO:427: (Length of Sequence = 317 Nucleotides)

AACCTGTCT CTACTAAAAA TACAAAAAAT TAGCTGGGCG TGGTGGTGGG CGCTGTAGT CCCAGCTACT CCGGAGGCTG  
 AGGCAGGAGA ATGGTGTGAA CCCAGGAGGC GGANITGCAG TGAGCCGAGA TAGTGCTCT GCACTCCAGC CTGGGTGACA  
 GAGCGAGACT CCGTCTCAA AAAAAGGGCT GATAATGATA AACAGTGAGC ACTCCGGTCC TTTTCTTAC GTTTCTCTT  
 TTTCTTCTCT CTCCACCCCA CAGTTTTTGC TTTTAAACCA AGGTGTCTCT GCTTGATGGA AATTACATG CTAGTCT

SEQ ID NO:428: (Length of Sequence = 296 Nucleotides)

GTAATTACAG TATTTCACG TAGAGACGGG TTTCTCCATG TTGGTCAGGC TGGTCTCGAA CTCTGACCT CCGGTGATCC  
 GCGTGCCTCG GCGTCCCAA GTACTGGGAT TACAGGTATG AGCCACCGTG CCCAGCGGT TTTTTTTTTT TTTTGTAT  
 AGCAATGGAA GAATGGCTC GTACACACGN TAGAGTGGA AGTCCAGGC ACCAAGGNTT CCCACCTAC AAGCAAGCTC  
 AGGGCTTTCT CTTCATCTT CCAGGGAGAG CACTGAGAGA TGATGGGGG TTGGCA



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SEQ ID NO:429: (Length of Sequence = 422 Nucleotides)

GAGGGTTGGA GACAGGAGAC AGTGGGGTGG GAAATCCAAA TCTCAACTGC TTTTGTACTG TCTCTGCTC CCGAGTCCCC  
 CANAGCCCAT GCAGACCCTC TGCTGTCTAT GATATCTGT TCAGCCCTCA ACTTCTCTA CCATCCCTGC AACTGGGGTT  
 CACTGTGAGC CAAACAGTT TGCTTCTGT TTTCTAAAAG CAGGCAGCCC TTCAGGACTG TMTCAATTCAA GGCATTTCCC  
 ACCTCTINTC TCCACTCATA TCCCTTCCCA AACTGCCTTT CCTCATTTCT CGTCTCCAG GGAGAGGGAC TNCAGGCTAC  
 CACAGNCAAA AATGGTGGTC TTCAGTCTA CGTAAGNCAA NCTGTGTGAG TGTGTAAGGA CTNAGGGTTG CTCACAAGGG  
 GACACACAGA NGTGGATGCC AG

SEQ ID NO:430: (Length of Sequence = 332 Nucleotides)

CGGATCAGC ACCCGGGACA GCGCCACCGC CCACTGTCAG GGGNTGGGT CCGGGGGGG CINGCGCTC GGCGTCTCCC  
 GGNAGTINTC CGTCCAGCCG TCGAGCAGGG TGCTTGANTN TMTCTGCAGA AAAGACTCTA GGACCCCGCC ACCATGTTCC  
 CCGAGCCCCC AACCCCGGG CCTCATGCG CCGANACGCC TCCGACTCC AGTCCCATCA GCCACGGCC AGTGCCCCC  
 TGGGCCCTGG NCACCATGT GCTGGTCTNA GGCTCTCINA TCTTCAGCTG CTGTTTCTGT CTCTACCGA AGAGCTGTG  
 GAGCGGGACA GG

SEQ ID NO:431: (Length of Sequence = 413 Nucleotides)

TGTCAATTAT TAAGATGGG GACATCCAAG CACCTGGAAC AAAAAGGACA CTAAGAATGG GAGAAGAATA CACAAAGGGA  
 GGTAGTACAG GGCAATAAC AGATTTTGG AATTTTCAA ATTTCTCTT GAAGTAATTT TACAGTCAGT AAATGGAAGT  
 GGAAAGAGG AATAGAAGAG CATTTTCATTG ATTTTTTTT TCTCTGTAC TTACACATCT CATGACCTCA TGTTCOCAGA  
 ACTTAACACT TAGTGGGT CTAGTAGATA TTTTGGGTG AAAAGATGTT TGCTGTTTG CATTTTGTTC TGTTTGTTG  
 GCTAGCCTGT GAATCTAGCA TTGTACGTGA GAAAGTGCAT TTCAGATTGA AAGCAACTGG GTTTTGGAAA TGAACCTCAA  
 TAACATATCC CAG

SEQ ID NO:432: (Length of Sequence = 292 Nucleotides)

TTACCGTGT TAGCCAGGAC GGTCTGATC TCTGACCTT GTGATCTGCC CACCTCGCC TCCAAAGTG CTGGTATTAC  
 AGGCGTGAGC ACCCGGCCG GCCACCATTC ACTAATTTTC AAGAAATGTG GAAGTGTCT ATATTINCTT CCGACTCCAT  
 AGCTCCAACA TTGTGGCTA TTATGAATTT GGCTATTAG TGATGCCAAC AATATTAT GAAAAAAGA TATAGCAGTA  
 TAGTTGAAGG AGGAAGCTGA AAGAAAACGG TCCATNGTG AGGAAAAGGC CC

SEQ ID NO:433: (Length of Sequence = 335 Nucleotides)

TTTTTTCTC AGCAGAGGAT TTTATGGTG GTCACCTGTG GCACAGGTA GAGGAGCGA AGTGCTGINT TTGTGGTGGG  
 GGGGGGACCA CAAACCCCG CCTGCCCCC TTGCTTACAT AGGCTTCCG CCTAGAAGCG CACATGAAC ATGCCGCTAC  
 GGATCOGGT GTAGTCTGG AGCTGCTCAA TGGGGCCATA TCCAGCCACT GCTGGGGCAC TGGTCATAGA TGTACTINGA  
 GCAGATCTCA GTACACAC TGGCATCCAC CTCGCAAT CCGCTTTC CATTCAGCA GGGGGGATG CCGGNGGCC  
 ATAGGTGAGG AGGCT

SEQ ID NO:434: (Length of Sequence = 390 Nucleotides)

GTGCTGACT GCTGATTGGA GATGAGTGT ACCATCTC TAGACAGTCT GTGCTTTTCC TGTCTTTGGA GCTTCCAGTT  
 CCACCCCAT CAGTTTTTT CTACCACTC CATCTGCCT TATTTCTCT TCTTCTCTT TGAAGTGAAG AGTACTCATC  
 TTTTCTAACA TCTTTTCATA AACTGTTTTG ATTTCACTTA TATTGATTT NAAAGTATAA TGTGCTGGTG TTCTATTTCC  
 TCAGTTAGAT CAGAAGGCC CTAAAGACAG GGCTCCATTG GTGTTAACT GCCATCTCA AGGTCTGGGA CTTGATTTCN

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CTTTTTTNAC CINCACAACA AGGCACTCCT CTTCACCCA GTCGGAATTT CAGTGCCTGT GGGTCAAAGT

SEQ ID NO:435: (Length of Sequence = 427 Nucleotides)

TCACTAAACA GTAGATTAT TTTATGTAGA TTGTTTTTC TATAAAAATA TATTTATGTG TTCACAGGAA AAAAGTTGAG  
TTGGTATGTG GGGGTGACTT TCAGATACAT AATTAGTTAA AGGTTTGCTT ATGAAGTTAG AAGGCATCTT AGCTTTTATC  
ATTTTCAAAT TTTTCTTCAT AAAAAGAAC ACCCTGTGAC AAAGATAAGG TAACTGAGAT TATTATTAGC ACTTTAGAGT  
TGAGAGAGTT TGAAATAAAA AGGTTAAGCA ACCTGCCTAA TGTTTATGTA CAAAATCAGT GCTGGAGCCA GGAAGAGAAT  
TTGGATTTTC CCAACCTTG GACAGTTCTC TAGGGACTCA TGCCCAACCA CCATTCTTGA GACTATATAC AATCAATTAC  
ATTAAATGA TATTGACAGT AGACTAG

SEQ ID NO:436: (Length of Sequence = 249 Nucleotides)

TCAAATAACC AGGAGGGGGA CAGAAGATGA TGGCAAGGCA GACTGGGCAG TGTTTTNTAG ACACAGAACA AAGAATCAGA  
ATTTGAAAAA AGANGAAAAA CAAATCTNOG CAGCTGCAAC TTTAAAGTAT CACCTTTATA GATGGCAGGG ATTTCCATTA  
TGCAAATGGA ATCTAAGATT TCAATGTGNA ATCTTAGAAT GCAGTTTTAC CACTTGCACT CINGTATTTG TGGTGCCAT  
GTGGTGAGT

SEQ ID NO:437: (Length of Sequence = 404 Nucleotides)

GTCAATCACC CTAATCCCTC TTTACCTTC ACAGAACTTT CACACTCCAA TGTACTTGCT GTTGTAGAT GCTCCTATAA  
ACAGAAAGCT CTGGGAGACA GGTGCTTGT TATTCTTGCT CTCTGTCATA TCTCTGGGCC TATCACAAGT ACTCAAAGCA  
TAGAAGTTCA ATAAATATGT GTTCAATGTA AGAAATGATC AGTGATTCTC AAGCTGCAGT GCGTCAGGA TAACCTAGAC  
AGCCTGTTAG CACGGNTCAC TGNNNCCAC CCCACAGTT TCAGGTCTGG TCTGGGNTGG GGCCAATAA TCTGTATTCC  
TAAAGTCCC CAAGCAATGC TGGTGCTGTT CGTCCAGGGA CCATGCTTAA AGAACCACCC GGAATAGGAC TGGTGACAA  
AAGG

SEQ ID NO:438: (Length of Sequence = 337 Nucleotides)

CTGCAACTTA TACCTTCCAT TTAATAAAGT CCCAGTATGT GTCAAAGTAG TTTTCATTCC TCACAGCCAT GTTATGAGCT  
AAATATCACT AACTTTCCCT TTCAAAGGTG AAATAAAGT AGACTCTCGA AGATTAACTT GCGCAAGGTC ACCTAGCTCG  
TTAGGAGGCA CAGGTGGGAC TTGAACCCAG TTCTTTCTGA ATTCAAACCC TCCAAAATGT CTGTACATC AAGCTGCTTC  
AATGAGATGC TAGAAAATCA GGACAGTGAG CAAGCTGGAG ATAANGAAG ATATGGAGGA ACACGGGAAG TGTGATCCTC  
ACACACATAC CCTGCAG

SEQ ID NO:439: (Length of Sequence = 380 Nucleotides)

CATCGTGTAT GAAGGTAGCC ATTTTGTACA TGTACCTTG TTAAAAACAA AAGAGCAGCA ACATGTTTAG AGTGGTGTCT  
ATAGATAGAA CACTGCTGTT ATGTTTAAGG AAAATTGGGG CGGGGGCAGA AAAGATCAAT ATGACTAGTT AGAAGACTAT  
TAAGGAGAAC TTTGTACATG AATTATGGAT GTAAGAATTA GAAAAAATAA GATGATCATG TTCAGAATTT TAGCTTTTTT  
ACAATTGTAG TGGAAAAGAA AACTCCTAGA GTAATGAATC AATGGTATCC TACAAAAGA GAGGTGCCAA AAATACCATG  
AAATATTATA TTAAAAAATT CACACGNATA GGTAGTTATA ATATGTAAAG GCCAGACTTC

SEQ ID NO:440: (Length of Sequence = 335 Nucleotides)

CCCTGAGCTT TTATTGACCA GTGGACTGTG ACTTTTGATG TAATTTTATT TTTGAGAGAG GGTCTGCTC TGTACCCAG  
GCTGGAGTGC AATGGGGTGA TCTTGGCTCA CTGCAACCTC CGCCTCACGG GCTCCAGTGA TTCTCTGCC TCAGCCTCCC  
GAGTAGCTGG GACTACAGGT GCACACCACC TTGGCTGGCT AGTTTATGTA ATTTTTTGTG TGTCTGTGGA GACAGGGTTT

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CACCATGTTG CCCAGGCTGG TCTCAAACTC CTGAACTCAG GTGATCTACC CGCCTTCCAA AGTACTGGGA TTACAGGCAT  
GAGCCACCAT AATAA

SEQ ID NO:441: (Length of Sequence = 356 Nucleotides)

ACTAATTTTG TTTCTGCTTC AACCTGCATT TCCAGAGGTG CCTGTGGTC TGTAATTTGGT TCTGGCATGT TTATAGGTAT  
TACAAAACCA AGTCTTATTT TGCATTTTAC AGGATTTAAG ATGAATAAAG TGATGTGGTT GTGCTAGGTT AGAGTTGTAC  
AAATTATACT CCATCGGG ATGGTGGGT CCCAGGCCTA CAACCTGACC TCTGCCCTCA CGCCCATCGT CACGCGCTCC  
CGGTGCTTCA ACGAGGAGCC CCTGAAGCTG GGGGCTTTT AGCAGGGNCC CGGCCAACCT CAGTGACGTG GTGCAGCTCA  
TCTTTCTGGG TGGGACTCCC AATCCCTTT CCGTTT

SEQ ID NO:442: (Length of Sequence = 371 Nucleotides)

GATGATTTTG TATCTTTTTC TATTTATTTA GATAATCAAA TGATTTTGT CCTTGGTCTT ATTGATGTGA TGTTTATTTA  
TCATGTTTAT TGATTTGCAT ATGGTGAGCC ATCCTTGTAT TCCTGGTATA AATGCCACCT GATCATGGTA TATNATCTTT  
TINATGTGCT ATTTGATTTG GTTTGGCAGT ATTTTGTGTA GAATTTTTC ATCTGTGTCT ATTACGGATA TTGGCCTGTA  
GTTTTTTTGG CTGTGTCTT CTTTGGTTTT GATAATCAGGA TAATGCTAGC TTTGTAGAAT GAGTINAGGA GGAGTTATCT  
ACTCTTCAAT TTTTGGGAAC AGTTGCAGAA CTGTGTGTG TTTTGAACA G

SEQ ID NO:443: (Length of Sequence = 329 Nucleotides)

TGAATGCTT TATTTTTTIN ATTCCCATC CAGAAACCCC AGTGTGATGG TGGAAGCAGC ATGAAAACAA CATCTCCCCA  
GGCCTGCGAG TAGAGGCGAA GGAACAGAG CTGCCCATGT GCTGTNTCT AAAGACGCCA CCTCAGGTT GATGTCACTT  
GTGGGAGACC GGGTCCACT ACAGACACCA GGTGATGGTC CACGAGGCC CAAGCTCCAG CCTGTGAGT CCCCAGACA  
CAGGCTCATT AATAGCTTC GTACAAAAC CCAAGGGTGT CCTCCAGCT GGTAAAAAAT TGGGCAATTT CTACTTGGAG  
GTCTGCTGT

SEQ ID NO:444: (Length of Sequence = 358 Nucleotides)

TTTTTTTTTA AGTACATAGG TCTTTATTTA AACACTGATT TTTTTTTTAA ATATATACAC ACAAACCTTA GTTCAGCAAG  
GCTTCATGAT ATACACCAAT TCCAAAATAA AACAATCAAA TGGTCCAGGT GTAGAATGCC AGATTCTTT TATCATCTGC  
GAGGAAAAGA GAAGCAGGAT GAGGAAGAT GAGGAAGGC GGGGACAGC TCTGCCAGA NGAGCTGCCG CCTCCTGGCA  
CAGCAACGC TCCAGGCTG GGGCTGTTT ATATCTGGAG TGGAGGGAG ACTCCCATG GCGCTTTGG GACTGAAAGG  
CCCAAGGCTG TCACCAGGT CCGAAGAGA GGGAGGCA

SEQ ID NO:445: (Length of Sequence = 302 Nucleotides)

TCAGAAGGT GAGAAATAAA TTGCTGTGT TTATAAGTA ACCTGTTTAT GTTATTTTTT TATAGAAGCC TGATCAGAAT  
AAGACAATAT TGGATAGAAT ATTCAGGAAT GTCTTGCTC CAATGTTGGC CCCCCTGTAC TGAGCTCTAA TCTACACTCA  
CCTAAAAAAT TATAAATCA TAATAAACT GAAAAAGTCA AACTCTCAAT TGCATCCAG CACAAATATC ACAGNTGNTT  
ATTTAAAAA TTATGTCAAG GCCCTAAAA GCTAAATCC NCAGTCTGC TAATATTTCT CT

SEQ ID NO:446: (Length of Sequence = 367 Nucleotides)

ATATATATAT ATACACACAC ACACATACAT ACATACATAC ATACATATAA CCGTGTGTTGG GTAAGGCCTA TTGACAGPAG  
CCGATATCT GGGTGAAGT TAGAAGATGG GCAAGGAATT CTTATCTCAG AGTTTCAACA CTGGACAAAT GTGGAGAGAA  
GTCTCCTGGG AAAATGCAGA TGCCCAATAA CTTCCAAAAG AATCAGGGAA GTTGGAGTAT TTTTGAGATT TACAGTGTCT

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TTACTTCAGT AAAACAAGCC ACAGCAACAT TATGCTCTGC AGAGTCTTCT GTTCACCTTT GGGATGGAAA AGAGCTGCTT  
CTCCTAGGGN GGCAACTAAG GCCCAGGACC AAAACTCCCA TCTCCTA

SEQ ID NO:447: (Length of Sequence = 295 Nucleotides)

CTGCAAACCC TTCAGCATTT AGCTAAAGTT ATTTCACAAT TCAATGCTTG TCTTGCACTG TCCTGGTCAT TTA AAAACTG  
GTATCTCTTC AATAGCAAAT AGTATCATAA CAGACCACTA AATTGGAGG GAAAGTGGTT TCTATTGCAG ATGGATGTAA  
TTAAATTTGG TGTAAATCAC AGGTACAGA ATTCTTATCT GGTAAGAAAT CTGACTTTTT TTTTAAAGAA GAAAAATAT  
ATCCAGATCT GTATCCACAT GCTATTTAAA TGCTCAGGNC AAAAGAAGC CACTA

SEQ ID NO:448: (Length of Sequence = 233 Nucleotides)

CAGAATCAGC CCAATGCCC ATCAATCAAC TGTGCATAAA GAACTGTGA TATATATATA TCATAGAAGT TCAAACAGAA  
AAAATACAAA AAACCTAGCA GAGGATGTGA TCCTTTGCGG TTTATTTTGA TGACCATGCC ATCTTCTAAT CCCAGAAAA  
AAACTGGAAA ACAGAATAAA TATAATTINC TGATTATNCT TATGTAACAT AAATGGAATA TATATATATA TAT

SEQ ID NO:449: (Length of Sequence = 341 Nucleotides)

ACTTCCTTCC TCAGGCTCCT GTACCAATCT TCAATTCACT TGGGATGTCC TAGTCTAAAA CATTATTTTC ATTGAAAGG  
AAAAATATCA ATTTCTATCT AAATTGGAGT AAGATTCAAT TCAGATGTGT TTATTTACAA AACATAAGTT TGTATTTTAT  
CTGTGTTTAA TTTGATCCNG GAACATTACA TGTAAAGAAC ATTCCATGTA AAGAACCAGG CAACTTGGCC AGGCATGGTG  
GCTCACACCT GNTAACCCCA GCACCTTTGG GAGGGCCAAG GCAGGTGAAT TGGTTGAGAC CAGGNGGTTT AAGACCCAGC  
CTGGGGCAAA TATTGGOGAA A

SEQ ID NO:450: (Length of Sequence = 313 Nucleotides)

TTTTTTTTTT GACACAGTTT CCAGTCCTGG AAACCTTTAG CTAATCTTTA GCATTCCTTC AATGGTGGGA ATGGSCAACA  
GATCACCATA GTATTAATAC TCTGTGTAAT TTTATCATA GAATGGTTAA TTTCCATATC ATAGTAGAGC TGTTCAGAT  
ATTTTGAAAT CCCATTATAC TCACTGCCAC TTCAAGATTA CTGTAGTTGT TAGAACAGCT GCTAGATCTT ATTACTTAAT  
AAATTAATAA AGTGTGAATA TAACTATATA ACCATTTTNA AAATGTTTTT TGGATAACTT TCAATATAAT TGG

SEQ ID NO:451: (Length of Sequence = 351 Nucleotides)

GGGCCGGCTC CTGGGCACCC ACCCAGCTCA TTGCGGAGC GGCTCCCCTC CTGGGGTIGA GTGTCCITGG CCTGAGTCTG  
CAGCCTCAGC CATCTGTTC CCAACTTGAT CTCCACTGC TAGTTACAAA CAAATGCCCC GGCTTGTCGA AACCTCCTGG  
GCTCAGTCCC CAGTCCCGG GGCATCATT TCATTCTTTC CTAGCCTGTA AGGTTTCTCC TGAAAAATCT ATTGTTAGTC  
TAATATGAAT TTCCTAATAT GTGACTTAAG GCTTTTCTCT TGCTGCTTTT AAAATTTTCT CTTTTGTCTT TGACTTTGAC  
AATTTGGCTA TAATGTATGT TGGAGAGGAC C

SEQ ID NO:452: (Length of Sequence = 363 Nucleotides)

GACAAAGGAG AATTCTTGCT TTACCTATGG ACTGGCTTAA GCGGTGTC ATCCGAGGAA TGTTTCAAAT GTGTCTGTGT  
TTCTCTTAC ATTCTTATT GTACCTCATT GTTCAATTCA CTTTGTAAA TTCCACCTAA CATTTAATTA TTTTAAATTT  
CTCCGTCATG AAGTTATTTT AAGACACTGG AATAAGTGCA GCTTTGTTTA TAACAGCATA GGATTATAAA CAACCTAAAG  
AGTCAGCAGT GACATTGATG GCACATGCAT ACAATGCAAT ATTGTGTAGC TGTAAATA ATAANGAAGA TCCTGCTCTG  
TGTATTGAT ATGGGAAGGC CCCCCAAGT CTACAGTTAA GGG

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SEQ ID NO:453: (Length of Sequence = 382 Nucleotides)

ATGAGGGAAA AGATGGTGCC ATTGAAGATA TTATCACAGT GCTGAAGACT GINOCCTTTA CTGCTCGCAC CGCCAAGOGT  
 GGCTCTGGGT TTINCTGOGA ACCTGTTCTC ACTGAGGAAT ACCATTACTA AACTATTACT CTTTCTCACC TGATGCTCTT  
 AAAAGATCTT AGAAACCAAC CATAACAGAG AGCOGATGOG GTGAGGAGAA GCGTCAGGOG GCGCTTTGAT GATCAGAAGT  
 TGOGTCTGT TAATGGTGCC GAAATAACAA TGTGAACCTG AGACTGGCCT GCAATGAATA CAGGGGTGTG CGTGTTCAGG  
 AGGTTTTCTG TTGCGGTCAC CCATGATGGC GGGCCINCC ATTGGGCCA ACTTTTCTG GG

SEQ ID NO:454: (Length of Sequence = 391 Nucleotides)

CGTCGCGCTG GTGTGACTGG CTGGAGAAAT AAGTTAGGA GAATCTAGAT ATGGTTGAAT TGTCAITGCT GCTCAAAATT  
 TGTTCCTTTG TGACAACAAC AACAACAACA ACAACAACA CAACAACAAC AACAGGTGAA ATTATCTTGA AATACAAAAG  
 AACGTCTGTT GGTCTGAGA GTGAAAAAAG GAATCCTTAA CAGCTTCAGC TTGCACCAAG AGGATTTTTT TTTATCAGCT  
 TCCCTTCATA AGAGAGGATG GAGGATTTTG GAAGAGACAG AACCTGGGAG AAATTTTCACT GAGCTGCCAC TTACTGGTTT  
 AACCTACTTC CACAGAAGGA ACCTATTATT GTTNTATTG GGAATTCAGT AAATGTGGGC CATGTAAAGG G

SEQ ID NO:455: (Length of Sequence = 282 Nucleotides)

TTGAGTACTC ATTGAGGAC TGCAGTCATA GATTAAAGT GTAATCAGTC AACTCAGTGG AATTACTTTC TCCATTATC  
 TTAAATTGCT TCAGGACTGT TTCAGCCTAA GCCAGTAGCT GGGTTTAAAC AAATTTGAAG ATTITNCTAG GAGAGTTTGG  
 CAGGAGGAGA GAGGGGCAAA GCGGTGTAAG GCAGTGTTA TAACAGTGGC CCATGGAATT GATCATGGGT AAAGAGAAAA  
 CAAGGACATG CGAGGAGGTG ATAAATAGAN CAAAACAAAG CA

SEQ ID NO:456: (Length of Sequence = 340 Nucleotides)

CTAACTTATG TTTGAGATCT TCAATGAAAT TAGTTACTAA TATTINGCTT TATCTTCTC AAAAGATTTA ACATGATAAT  
 TCTGACCTAA TCCAAAAAAA AAAAATTCAT GGGCCACTGT TTTGCATGTA ATATGTAAGA NCTCACCTTG ATGTTAAACT  
 CCAACCCCTG GCTGAAACAG GTTAATGATC ATTTGTINGIT ATTTATTTCT ATAAATAGTT TGAAGTTGGC CAGGCCCTGGT  
 GGGTCTCGC TGTGTCTCCC AGGGTTGGAG TTOGGTGGG CAAATCTGG CTTCACTGCA AGCTTCGGC TCCCCGGGT  
 TCACACCATT CTCTCTGCT

SEQ ID NO:457: (Length of Sequence = 338 Nucleotides)

ATGAAAAAGT CTCAGAGAT TATCAGTGGG CGGATGACAT TTGCCCTCTG TTGCTATTCT TTGACATTCA TGAGATTGTC  
 CTACAAGGTA CAGGCTGGG ACTGGCTTCT GTTGCATGC CAGCAACAA ATGAAGTAGC CCAGCTCATC CAGGGAGGGC  
 GGCTTATCAA ACAAGAGATG ACTAAACGG CATCTGCATA ACAATGGAAA AGGAAGAACA AGGTCTTGAA GGGACAGCAT  
 TGCCAGCTGC TGCTGAGTCA CAGATTTCAT TATAAATAGC CTCCTAAGG AAAATACACT GAATGCTATT TTTTACINAA  
 CCATTCTATT TTTATAGG

SEQ ID NO:458: (Length of Sequence = 370 Nucleotides)

GTTTTCTTTC GGAGCTGAAC CAAAGAATGT GCACCTCTT TCTCTAGTGC TGTTGTGTCT GCTTATTTTT GTATTGTGC  
 TTTCATCCA TCTTCTGTGA TCACAAGGCA TTCTTAAGGT TTCTAGCAC GACTTGOGGA CATCCAGACT CGTGGGGGGC  
 CCACCCATGG CTCGGTAAGC CAGCAGCCCA GGGCACTGGC ACTACCATGA GGCATGCAAT TAATTGCTGC ATACAGCTGT  
 TACCCGACGG CGCACACAAG CAGCTGGTCA ACTGCCAAGG GGGCCCCCAT CACCGTCACC AGCGTGCCC CAGGTGCAA  
 AGGAGGAAAA ACAAAATTC TGGTTTCCT GTGGGACAGT AAAGCAGATG

SEQ ID NO:459: (Length of Sequence = 339 Nucleotides)

ATTTTCTCTAG AACTGAAATC ATCTACGGTT CTCAGAGCTA AACTTCCAAA GCTACAGTCA GCAATTTTTC ATCAGAGCCC  
 AAGGGAGAGG GGCCAGGGTA AAAGAGACGA GACTGTAGAG AGGCATAGAG AGACCAGTAG GAAGAGGGTG GGAGAGGGCA  
 CTTATTTCTC TCTGTCTCT CAGTGGGTTA CAAATCAGAT CTGGTGACAA CACTGAGGGG GCCAGGTCAG GGTATGTNGA  
 TGAGAAATGA CACTGGAAGG AACATCAAAG CCCAGCTAC AAAAAGAAAG TCATCAAGCC CCAAATAGAA GGGGAGCCT  
 CCCAGTGCAC CTCAGAAAT

SEQ ID NO:460: (Length of Sequence = 380 Nucleotides)

GAGCTTTTGC ACTGCAAAG GAACAGTCAG CAGAATAAAC AGACAGTTAG AAGTACTTCC CTATGTAGAG ACACACTCAA  
 GTGAAAGGGA ACCAGGCTCT ACCACTTGAA ATAAGGAGTA TCAAGGAAGT TGTGGACAGC TTTTAAACT ACCACTGGCA  
 ACTAGGTCTT GAGGTGGATA AATGAAGAAA TTGGGGGAAT CTCACACTGG AGATGTTTGA TGTAGGTAAA TGANCTGAGA  
 TTCATTAGGT GTGAAATAAT GAAGTGATA TATAGTTCTG CATATACATG CCTGGGGAAG GTATAATATT CAGAGGCATA  
 CTATCACTCA ATTTGTATCT GCTGTGGGCC TCAGACAGTA CAGGGGCAGT GTTTCATTG

SEQ ID NO:461: (Length of Sequence = 317 Nucleotides)

GTCATTAAGA AGCCTTTATT GGGTTATATT CAATTTGACC TCCACCAA TTAAGCGGGA AAAAACAAAA AAATAAGAAA  
 TCCAGTAAA AGAGCCCTC AAGATTTTAT AACTACAAA CTAAAGCTGC TAGTTAATAA GGAAATGGCA GAATTTTCAG  
 AGCTGTATAA TACAAAAATT CCTGTATTTT AAGCAGATGT TTCTCTACT GATGACAAAT CTTCCAACAC AATGTGAAGT  
 TATGCTACTT GGGATATTTG TAGGCAAAAC CATTTTTTTT TTGTACAAA ACAAAGCAA GGGACCTTGG AAAAAA

SEQ ID NO:462: (Length of Sequence = 261 Nucleotides)

AAAAAGGCCA TAAATCCTTN CCTCGTGA GCTTACCTTC TAATAAGGAG AGACAGAGGG TNAGAAACAA ACAAACAAAA  
 ATATGTINAGT TAACACAGAG TGTGGAGGG TGTCAGGTGC TATGGGAGAA ACGTGGAGCA TGTCAAGNG AGAGCAGGCA  
 AGAGGGCATT CTGGAAAGGC CTAGGANGAT GGTGACATTT TACCTTCATA TCCACCAACC CCCAGCACAA AGCATTTTCC  
 AGAGGNAGNC AGAGGAGGGC A

SEQ ID NO:463: (Length of Sequence = 387 Nucleotides)

ATACAAGTAC ATCCAGGAGC TATGGAGAAA GAAGCAGTCT GATGTCATGC GCTTCTTCT GAGGGTCCGC TGCTGGCAGT  
 ACCGCCAGCT CTCTGCTCTC CACAGGGCTC CCGCCCCAC CCGGCTGAT AAAGCGCGC GACTGGGCTA CAAGGCCAAG  
 CAAGGTTACG TTATATATAG GATTCGTGT CCGGTGGTG GCCGAAAACG CCCAGTTCCT AAGGGTGCAA CTTACGGCAA  
 GCCTGTCCAT CATGGTGTTA ACCAGCTAAA GTTTGCTCGA AGCCTTCAGT CCGTTGCAGA GGAGCGAGCT GGACGNCAT  
 GTGGGGCTCT TGAGAGTCTT GAATTCCTAC TNGGGTTTGG TGAAGATTTC ACATACAAAT TTTTGA

SEQ ID NO:464: (Length of Sequence = 397 Nucleotides)

GTTAGCCGTG GGCTGTGGC GTGCGTGAA CGTACCAGGT ATTGTGGCTC CATTGGCTGA GGATGCTTCT CCAGCGAAGG  
 AGGCAGGGAG CCGGGGAAGT GGGGTGGGT CGGACACCG ACAGCAGCTG CCAGACCAGC CATGCTGCGC TCAGCTCCCT  
 CAGGCTGTCA CTCTTAATCA TCATGTCACT ATCTCTGGG CGTGTCACTG ACCATCAACG ACGTGTCCCC CAAGCTGCAG  
 AGGACGCAAA TCCAGCTCTC CAAGAGGCTC TGTGGCCCT CTCCACATGG GCTTINAGGT CAAGGGTTGG GGGCACGTTT  
 GGACCGNCCT TCCTGNCCTT TTNGAAGAAG ATCCTCCAAN GTNCCGGCT TCAGCTTCTT CCGGGCTCT TTTGGCA

SEQ ID NO:465: (Length of Sequence = 320 Nucleotides)

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GACGACATTT ATTCCCTTTT CAAATGTTAC AGTAAAACCA GGTGGAAGAG AATGGTTTTA GCAGTTAGAA AAAAAAAAAA  
 AGTACAAATC TGGGGTTTGG CCATTAAAG TTATTTACAA CAGTGGGAGA AAAAAAGNCA AGAAGTTGTT TCACATTACA  
 GACCTCCCCC CACCCCAAAG CCTAATACTT GCTTACCAAG TCAAAAAGA GACACAGTTG ATTCACAGGC TGGAGGTTTG  
 AACTTGAGTA AGACATTAT AAAAACTAG ACGGGCAGT GTCCTNCCCA GCCCAGGTGC CACTTAGGCC AGCACAAGGG

SEQ ID NO:466: (Length of Sequence = 352 Nucleotides)

CATTGTATTT CCCTTCTTCA AATTAAATTAC CTACCAAAAA ATGGAAAAGA ATTTTACATG CACTTTAAAA TAGTAAATG  
 GAAAGTGAAT TTTTAAATA TATGCATTAA AAGTTTACTT TAATTTCCAG TGGGACTTCC TTTATGAAAT TTTCCATAAC  
 CTCCTCCTGG AGTATTACAA GATCTCCAAC ATCTCATAAA CTAATTGTGA TATTAGTGA ACCATAAGCA AATGTATATT  
 TTTAGTGGAA ATAGATTATG AATGAAAGCC AAGCACCTTA CTTTAAAGCC AAAATATGAG ATTTTCCATT AAAACCAATT  
 GGTCCATAAT AGGGAGGGG GTTTTTTAAT TT

SEQ ID NO:467: (Length of Sequence = 352 Nucleotides)

TGAAGGCCAA AAAATAAATA AATAAAATA AATACCATT GCAGAGACAG AGAAACCATC AGAAGAAGAC AAGCAAGGTT  
 GTTTGAATTA CTACGCCTAG AATTAGAAT AACTACTATG ATTAAAACGA AAAAGGCTTT AATGGATAAA ATAGATAGCT  
 CCTAATAACA GATAGTAATA ACATATGGGT AATGTGAGCA GAGAGATGGA AATCTTAGAN CAACAACAGC AACAAACGCA  
 AAGCGTTAGG GATCAAAAC ACTGTAAACA AAATTAAGAN TCCCTTTTAT GGGCTTNTTA ATAGNCTNGG ATACAGGTAA  
 GTAAAGAATC CCTGTGCTTT AAGGAGCCAT CA

SEQ ID NO:468: (Length of Sequence = 336 Nucleotides)

TGACATCTGC ATCTTACATT ATTAAATGCA AAGGAATATC AAAGACTCCT CTGCTAGAAC CATTITTTATT CATAAAGTCA  
 CATTATCATT GTAGAAGTCT GTTAAAAATG CTACCTGAAA TGAATTATGT CCGTCTTCCC ATCTGGCTTA CAAAATCTT  
 GAGGAAGCAT CTGCCTGTA GCTCTTTATC TTTCTATTTC CTACTACAGG GACAAATGAT ATGGAAAGAT AAATGTGTGT  
 AAGGTGTATAA ATTCTCAATA AATATTGCT GAATTAGATT GTACAGTTGT TATCTTTTAA GNTTAACTCA TCCTGAGGTA  
 CATTITATTA TGGGC

SEQ ID NO:469: (Length of Sequence = 156 Nucleotides)

GACCGATGTA GAATTCTGTC TGGAGACGTT CTCCTTCA ATTCAATGGG AAGGNTCTTT TCTGGCATGA NCTCTCCGAT  
 GTCTAATGAG CTCTGAGCAC CATCCATAAG CTTTNNCACA TTCTTTANAT ATAAAAGGTT TCTCTCCACT GTGAAT

SEQ ID NO:470: (Length of Sequence = 350 Nucleotides)

TTCTCATGTC TGAATTTAC ACGCACAAGT CTGAAATGTG AAGGTTTCTT AATGTTGGTT TTATGGTTTG TGTAAAGATT  
 TTGGGAAATG AAGGGCTCTT CATTAGGATA AAATGGTCTT AACTTCCAG AGAAGAATTT CCTGACAACG TGSGTGAAGT  
 TAGATACAAA TGTTAATATA GAAGANTGCT TTTATTGAA TTTCTAGCAA ATGGTTTCA ACTACTTTAA ATATGACCNA  
 CTTGAAAGTA TTATCCINT TTTAAACTA CTTTINATGT ATAGATCTAA GGTCTGCTTG AAGCTAGTAG GTTAAAGTGT  
 TTGAGAAATA AAGGCAAGAT TTTTNCNTTA

SEQ ID NO:471: (Length of Sequence = 270 Nucleotides)

GGAGCAGGGC TGGGAGTCAG TGGGAGATTG GGAGTCCAAG TCTGGACATG TTACATATGC TATGTCTATT ACAGATCTGA  
 GTATAAATGT GAAGTGGAGT TTTACCACGT GATTCTGAAG TTCAGAGAAG AGCTACAGT TAGAGATAAA GATTINGGAG  
 TCACAAATAT AAAGATGTAT GACTTNATGA GATTACCAAG GAAGTGGAGA TTAATAGCAA AAAGAAAAGT TTCAAGCTTC  
 AAGCCCCGAA GCATTCTAAT GTTTACAGCT

SEQ ID NO:473: (Length of Sequence = 345 Nucleotides)

TTTATTGTAG TTCAAATACA TAACTGAAC ATTCAAACAT CTTAAAATTA AACTTTAGCA ACAAAGTTTA ACATTCAAAC  
AGGAGTATAG TTTACAAGAA ACACCCAGAA AGGTAATTTG TTGTCTAATC CAGAATATTG ATAAAGATCA CTTAATGGTG  
AATAAAATAT GTTAAACCAG TGGTCTATT CTGGCCAACA TGTTAGTTAT GACCGTGGT CCATACCTGA GAAGAAATTA  
CTACATAAAT CTTCTCTTAG GCTAAACAAC ANGACTCGGT CTATAATTCA GAGGGGNTAA TCAAAGCAGC TAAGGGTACC  
AAAATAAAAC TAATCTGATC TTTAG

SEQ ID NO:474: (Length of Sequence = 433 Nucleotides)

CAGAATTAGA GCTGTACCC AAGGGGAAT TCTGTCTAG GAGACAGTGA GTNCTAAGTA CACTCTGGAC AAGCACCAGA  
CACAGAAGCT GCCTCAGTTT GTGCTCCCC TGCAAAGCAG AGCCTGAGAC AAGGATTTGG GTACAAGGAG TTCTACTCAA  
TATTATATTT CCAAGATGCA CCCATGCTTT ATATGGCTAT AGTGCAATCA TTTTACTGCT TTATACTTTC CATTAGGTGA  
CTATATTAGT ATATATTTAT AATTCCTAGG TCTTTTGTG CTCTTATTTG TTAATAATTA TAAACTCCAA GCCCATTGTG  
GTAGATTGCT ATTTCTCAGA GATATTTTCT GCTCCTTCCT GGGGGACAAT AATACTNTTC TOCCATCAAT GGCAGATGTN  
GGCCTTGINA CATTTTCTGG TCAATGGAAT GAG

SEQ ID NO:475: (Length of Sequence = 427 Nucleotides)

GATATGGTTT GTGTGCCAC CCAAATCTCA TCTAGAACTG TAGTTTCCAT AATCCCCACG TCGTGGANGG GACCTGGTGG  
GAGGTAATCG AACCATGGGG GTGGTTACCT CCATGCTGTC CTTATGATGG TGAGTTCTCA TGAGATCTGA TGGTTTTATA  
AGGGACTTTT CCCCCCTTTG CTCTGCACIT TTCCATGCTG CCACCACGTG AAGAAGGATG TGTTTGCTTC TCCTTCCACC  
ATGATTAAAG TTTTCTNAGG CCTCTCCAGC CATGCTGAAC TGAGAGTCAA TTAAACCTCT TCCTTTTAAA AATTACCCAG  
TOCCAGNAT GTCTTCATTA GCAACCTCAG AGCAGATTAG NCACAATTCC ACAACTTGGA GAATNGGTGT TCAAGTTTCA  
CTCTGGCCTT NAACAACCCA AAATTTA

SEQ ID NO:476: (Length of Sequence = 351 Nucleotides)

CGCCGCTAGG GCGGCGGGG GTGCGGACGC CGGCTAGGG GCGCGTCATG TGGCGCTCA CGGTCCCCC GNGCTGCTG  
CTGCTGCTGT GCTCAGGCCT GGCGGACAG ACTCTCTCC AGAACCAGAG AGAGGGCTGG CAGCTGTACA CCTCAGCCCA  
GGCCCTNAC GGGAAATGCA TCTNACGGC CGTNATCCCA GCGCAGAGTA CCTGCTCTCG AGATGGCAGG AGTGGGAGC  
TGCGGCAACT NATGGAGAAG GTNCAGAACG TCTCCAGTC CATGGAGGTC CTTNAGTTNC GGACGTATCG CGACCTCCAG  
TATGTACGG GCATGGAGAC CCTCATTGG A

SEQ ID NO:477: (Length of Sequence = 333 Nucleotides)

GGTCTCACTC CGTCATCCAA GCTGGAGTGC AGTGGTGCAA TCTCAACTC ACTGCAACCT CCGCTCCCGG TTTGAGTGAT  
TCTCATGCCCT CAGCCTCCCG AGTAGCTGGG ATTACAGGCA TGAGCCACTG TGCCAGCTG GGATATAGAA TCTAAGAGTT  
GATTGTGGAA AACACGTGAA TCTATTGCGC GCATTNTCA TTTAGCAAGA TGGCAGCAGT CCAGCTGTTC TTTGAGCTG  
GAGATGAACT TTAAAAATC CCGTTCACAC TTAATGTACT GACCGAGACA GAAGTACCTG AAAACAGCT NTGCATGGCA  
GGCCCGCAA TAG

SEQ ID NO:478: (Length of Sequence = 458 Nucleotides)

ACATGTTAAA ATAAGGTAAT ATGAAATAAT CTAACAAAAA AAAAAGTGCA GAACCAAGAC CTCTGTGATA ATCCTATTTA  
AAAAATAGC TACAATTTTA GTTAGAATGT TTCCCTATG AGAAAGCATT TTCTGCATAA CTTTAAATGT ACTGACCTTT  
TCCAAGCTTG CTGAGCTGGC CTTTGTCTCA ACTCACTTGG GACACCTTC CCTGTGCTC ACCAGGGCCC ACCCAAGTC  
CCAGTTTCTC TAGGGGTCT CTCGGGACCC CTTGAATCCC TTINCTGATT TGTGCTGCT TTAGCAGNCG GAATGGGCTG



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GCAGACCACC CTACATNCTC CTGTGTGTGG GGACACTGTC AGGNTGTCTT CCTGCAATTA GNTCTGTCTG AGTTTCTCTAC  
CATGTGNCCA GGATGGNGTC CATAGTGGGG GCATNAAGGA CTTAGGATGG GCCCAGTC

SEQ ID NO:479: (Length of Sequence = 360 Nucleotides)

GCATGTATC TNCITTAAGA AAAACACTTC TTCAAAATCC TACACTATGA AAAACTGTCT TCAGGAATG TTTATTTGGT  
COGTTGATCT AGTGAGGCTG AGTTCTTAAA TCTTTCACCC CCAAGTTAAA AATTGGAGCA ACAAACAAA ACTCCAGCAA  
GGCATAAATA AGATATTAAA GTGCATATAT ACAATACCAG AAAAGTTTAG ATTGGGAACA GCAAAAATTT CTAGTGCAAA  
AACTGCTTTT GCCAGCAAAG CTCCTCTCTT GGAATCAAAG GGCTACAGTA AAAGTTAAAA TTGGAACAGG NTTAAGCAAT  
GTCTGTCTTT AGTCACAAGT NAATATATGT GCATGCACCC

SEQ ID NO:480: (Length of Sequence = 322 Nucleotides)

GAAATTAAGT CTAAGCAAAA AGAAAAATAA AATGACGAGT TACTGGGTGC AGCACACCAA CATGGCACAT GTATACATAT  
GTAACAAACC TGCCCATCAT GCACATGTAC CCTAAAACCT AAAGTATAAT AAAAAAAAAA AAANTGAAAA GCTTCAGCCA  
GAGGTACAA TGCTACAAC TCATTGACCA AACTATCTC ATACCCGINT TAGAGCANGG NGCAGGAAAG CAAAACCAAT  
CTTCTTACTG TTCACTGENA TACAAGTTCC ATGAGGGGAT GCAATTININ TCTTGNCAC TCCTGTGTCC TCAGGGTATA  
GG

SEQ ID NO:481: (Length of Sequence = 369 Nucleotides)

CCTGGGCAAA GCATTGATCT GGTAGCCTTG CTCGAGAAGC CTGTCTCTCA CAGTCAAGCC TCAGAAGCCA ACTCCTTTGA  
AACTTCCCAA CAGCAGGGCT TTGGCCAAGC CCTGTGINTC ACAAATTOGC AACACAACAA TCAGATGGCA CCAGGGACTG  
GCAGCTCCAC TGCCGTCAAC TCTGTCTCTC CTCAGAGCCT GTCATCCGTC CTTGGCTCAG GATTTGAGA GCTTGACCA  
CCAAAAATGG CAAACATCAC CAGCTCCAG ATTTTGGACC AGTTGAAAGC TCCGAGTTTG GNCAGTTTT ANCAACANCC  
CAAGTACACA GCAGAATAGG TACAAGTCAA CCTACAACCT ACTACTTCT

SEQ ID NO:482: (Length of Sequence = 255 Nucleotides)

GAGAGATCT CGCTCTGTG CCCAGGCTGG AGTGCACTGG CGCAATCCCG GCTCACTGCA ACCTCCGCCT CCGGGTTCA  
AGTGATTCTN CTGCTCGGC CTCCCAGTA GTTGGGATTA CGGGTGACA CCACCGCACC CGGCTGATTT TTGTATTTT  
TGGTAGAGAT GGAGTTTCAC CATGGCTGGG CTGGTCTTGA ACTCCTGATC TCAGGTGATC TGCCCCCTC AGGCTACCAG  
AGTNCITGGGG TTACA

SEQ ID NO:483: (Length of Sequence = 353 Nucleotides)

CTGGATAATC AGGGCCATGT GCTTTAACAG GATGTAAAGG GGAAGCTCAT GATTAAACAT GGGAAATATG CAGCAAATG  
CAAGACCTGA GCTTAACCGC ATAATTAGAA CATAATTTIN CACTTCTTCC AGAGCATCAG CCAAGCAAAG GACTGAGAAA  
TCTGCAACCC AATTGTCTTA AAAAGAACT TAGGCTTCAC ATTTGTGACA TAATTCTTT TAAATGAAT ATAAATTTT  
ATTTTINATA TTGTAGAGC ATAGGATGAT TGAATCCAG TTGTGTTTT ATCTGACCTC CATATCTAAT ATGGCTAGTG  
CCGTTACTAC TCTACAGAAC GCGCAATAAG TCA

SEQ ID NO:484: (Length of Sequence = 371 Nucleotides)

GACCCAGAAA ATGGAGCTAG CTACATTCT CACACTTACT GTCAATTA CATGTTTATA TTCTATTAGT TGTAATTATT  
TTTCACTAT CTTCTCATTA GAATGTTATA CCTATAGAGC AGATACCAAT CCAGTTTAA TTTTTTGCC CACTCTAG  
TAAGTACGTG ACCTATTACA GGAACCTAA AACAAACAAA AAGTCTGCTG AGTCTGGAT GTTTTAAGGA TOGAAGAAC  
ATGTTGGTCC AATTGTGCTT CACAGAGGT TACCTCTGCT TTTCTACGA ATGTGGAAT GCTCCCATGT GGATTTTNA  
GGAATCCAG TCTACCTCA GGGGAAGGNC CACATGTAA GCCAGAGTC T

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SEQ ID NO:485: (Length of Sequence = 376 Nucleotides)

GGTCCGACGC TGTGTCAAGC TCTGCACCGG CCATGAGTAT GCAGCCAAGA TCATCAACAC CAAGAAGCTG TCAGCCAGAG  
ATCACCAGAA GCTGGAGAGA GAGGCTCGGN TCTGCCGCCT TCTGAAGCAT TCCAACATCG TGCGTCTCCA CGACAGCATC  
TCOGAGGAGG GCTTCCACTA CCTGGTCTTC GATCTGGTCA CTGGTGGGA GCTCTTTGAA GACATTGTGG CGAGAGAGTA  
CTACAGCGAG GCTGATGCCA GTCAGTGTAT CCAGCAGATC CTGGGAGGCC GTTCTCCATT GTAACCAAAT GGGGGTCGTC  
CACAGAGACC TCAAGCCGGA GAACCTGCTT CTNGCCAGCA AAGTNCAAAG GGGCTT

SEQ ID NO:486: (Length of Sequence = 396 Nucleotides)

TTGATATTTG TGTCTAATTC CAGCTACTTT GAAAGCTAAG GCAAGGGGAT TACTGTATTA ATAAATTCTC ATGCTGTAA  
TAAAGACATA ACCAAGACTG GATAATTCAT AATGAAAAG GTTAATGGCC TCACAGTTTC ACATGGCTGG GGAGGTCTCA  
CAATTATGG AGCAACAAG AGACTTTGTT CAGGGGAATC TCCACTTATA AAACCATCG ATCAGTGAG ACTTTTTTGC  
TATCATGAGA ACAGCATGGG AAAATCCAC CCCCATGATT CAATTACCTC CCACAGGGTC CCTCCAGGG ACATGTGGAG  
ATTATTACAA TTCAAGATGA GATTGTGTTG GGGACAGAGA GGCCAAACCA TATCAATTAC TTAAGGCTAG GGGTTT

SEQ ID NO:487: (Length of Sequence = 375 Nucleotides)

TGATTAAAT AATAGAGTTT AGTAATATGG ATGAATATAA GATAATATT TAAAAAGCAG TTGTATTTTT ATAGCCCAGC  
AAGATAAAGT TCAAATATGT ATTTTTTATA AAGATGGATT TACAATAACA TCAAAAATTA AAATGCACCT TGAAATAATA  
AAGACATGTA AACCTTTTA TGANGACAGA TTTTTTAANG CATTTTTTAA AATNCTTTT CATTGACAAA TAATTATCCN  
TATTINTGGG GTACACAGTA ATGTTTCAAT ACATATAATA AATAGTGATC AGATCAGAAT AATCAGCTTA TCCATCATTT  
CAAACACTTA TCATTTCTNT GTGTTAGGGG CCATTCAACA TCTGCTTCT GGCTA

SEQ ID NO:488: (Length of Sequence = 323 Nucleotides)

CACTGCATTA ATGATTGGNT TAACAGTATA TAAACAAGGG CCATGGTTTT TTTTACTAAA GTAGGTCTGA AAGATCAATA  
TAAATACTAA TGGGGGCAGG GAGGAGTGTT TTATACCCCA AACTCCAATA TTCCAGCTCT GTGTCCTGTC CTATTATAT  
AATTTGTAAA AATCTTAACG ACGCAGTGAT TOGAGTTTTC GTAACCTCAA TGATGTGTTA GAGGACAATG CATCTTGGTT  
TGAAGAATTT GCTGTATCCG AAGGCCGGA AAGTACTCGA CCACGATGAT TAAATACATA AAAGGATGGG TGATTCTTA  
CCG

SEQ ID NO:489: (Length of Sequence = 326 Nucleotides)

TTACCTTTTA CTCGATCAT AATCTCCAC CTGTCTAAGA GGTTATTAT TCCITATTTA GAGGGCCTCT ATTGCCATGT  
GCCTGGAATT ATTATATGCT CATCACTTA TGAAGAATAA AATTGTCTT TCTGCTTTA AAGTTACATT CGTCTTCCG  
CTCAAATCCT GATCTGGTCC ATTAAAGAGT GTTCGCAGAC AAAGTTTCTG AAAGATTAGA GAAGAATCCC CCCAAGATT  
GCCCCAACAC TGAACACAG ACAACACTA TTTTATTAA ATAAGNGAC AGCTTTCTAA AAGTATACAT TCCCTAATA  
AAAATA

SEQ ID NO:490: (Length of Sequence = 186 Nucleotides)

CTCAGATCCA TCAAGATGTG AAACCTGCAA GTTGTGTGCA GAGAAGGTAC ATGGGTTTCC TTCTTTTCTC ATCTGTATTC  
CCTTTTCTGC AATTATTTTC TTTGCCACAT ACTAGCCAGC AAACCAGGCA CCTTTGCCAG AGCCATTAAG CTACAAAAAT  
ACTTAATATT TTAATTTGAA CTCTGC

SEQ ID NO:491: (Length of Sequence = 347 Nucleotides)

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CCTGTACTTG TCGTCCCTCA TTCACTTAAT TATGATACIT GCGTGGCATC TTGCAGGTTT CTGATGCTGT TACCCAGTA  
 TAGACCAAGT GCAGACAGAA TTTCAITTTCT GCTTTATTA GGCACAGTCT TGAGAAACCC ATTGGCTTCA CACACAATTA  
 ATTAATTTNT GGCAACAAGC TACTATATTG GCTTGCAITG CACTTTCACC TCTCTGGGCA TTAGTTTNT CTATATTTA  
 TAAAGAAGG ACATGACTTT CTAAGGTTCC TTGCAGTAAT TATGCAGTTC TATCTAATA GATGCTTAAG CATAAACCC  
 ATTTAATAC TGTCCCAAGG ATCCAGG

SEQ ID NO:492: (Length of Sequence = 320 Nucleotides)

GAATTTGGNT CCAAGTTTG GACATTCAT TTCATTATA CGTCCCTTAA GTTATTTTTA ATCTGTATTT TCCTCCTCCC  
 TTTTGTGTTT TTTGTAATCT CTTTTTGCTG TTGTTTTGG TAAAGAAAC CATGTTTTTT TCGTCTGTG AGTGGCTCCT  
 GTTCAGAAIT TTACTGATTT CATCTGCTGG TATCATTTAG CATGTTGCTC TGTCGCGGT AGTACTTTAA ACTAGACGTT  
 AGATCTAGAG ATGTGATCTA CTTGGTGGG ACTTTGTCAA GAATACITGT AAGTAGGTAT TTAGGTACCA GGGGNCACAT

SEQ ID NO:493: (Length of Sequence = 339 Nucleotides)

TGCCAAGTTT GCTGGAACAT TATCAGATGG CTTAGGGAAG ACGATGGACA ATCGGCATCA GTCAGAGCGG GAGTACATCA  
 GGTACCATGC AGCCACAAGT GGTGAACACC TTGTAGCGG CATCCATGGC CTGGCTCATG GTATCATTTG TGGACTGACC  
 AGTGTATATA CTTGACAGT GGAAGGTGTG AAAACAGAAG GGGGTGTGAG CGGTTTCATA TCTGGCCTTG GAAAGGGCT  
 TGTGGCACT GTAACCAAGC CANTGGCAGG CGCCCTGGAT TTGTCATCAG AAACAGNCCA GCGGTGAGA GACACAGNCA  
 CACTTCAGCG GCCCCAGG

SEQ ID NO:494: (Length of Sequence = 366 Nucleotides)

GTAGGCCTTT GGAAAGTAAT TAGGATTAGA TAAATCATC AGGGTGGGGC CACCATAATG GGGCTGGTGG CTTTATAAGA  
 GGAAGAGAGA CTTGAGCTGA CACGCATGTC CTTCCTCTCT TGCTATGTGG TGCCCTCAGC CATGTTAGGG CACAGCAAGA  
 AGGCCCTCAC CAGATATTGG GGTGGTCTTC GACCTCCAC CTTCCAGAAC TGTAAAGAAAT AGATTTTTTT ATATATTACC  
 CAGTCTATGA TATCTGTGA CGGNAACAGN AAACAGACTA AGACAAGCTT CTAAACAAA TTGANAATAG AGTTTAAAGA  
 TNCAGACTTT CATTCCTTT AACAGGGGCC AAGAATATCT ATTCA

SEQ ID NO:495: (Length of Sequence = 384 Nucleotides)

CGAGGAAGGC AAGAAGCGCA GGGGTGGGCC CGCTGGCGT CGGTGGCTC CGCTCCTGCT CGCAGCCCT GTGGTCAGAG  
 CTGATACAA GATTCAAGAC CTTCTNTTG CTGTATACCC GCTCCAGGT GGAGCCACAG ACACCCACCG CCACCCGGC  
 TGGTCTGCTN TCTTTCTG TGCTTTCCC TCCAGAATGC GGCTCAGAC CTAGAAGCTC AACCCCCCTA TGAGGGCCAC  
 GTCTGGGGT AGCTCCTGAC CTTCGACCTT ATGTCCAAAT TTCACACCA TGGTTTTTCA TTGACCCGG CCCCTTCTCG  
 CTCATAATGA CAACNAGCTT CTTTGAGAG GGATCAGAGN CCAATTGCAC AAGGAGGAGC CGCT

SEQ ID NO:496: (Length of Sequence = 342 Nucleotides)

TACCTTAGTA AATGCAATTT TCGAACAGGC CCCATCTTC AACTGGTATA GCATCTTCCA CACCTGTAG CTTCAAACA  
 TCACCTGTTA AAATACTGCC CATTCCATGT CATGTATATC TGCCCATTTA TGGGAGCAGT GAGTGAACC CTGACAGTGA  
 CGGACTTTAA GCTGTACTTC AAAAATGTG AGAGGGACCC GCATTTTATC CTTGATGTTT CCTTGGAGT GATCAGCAGA  
 GTGGAGAAGA TTGTGNCAC AGAGCCATGG AGACAATCC TGTGGTATAG AGATAGTGTG CAAGGATATG AGGAACITGC  
 GGCTTGCTTA TAAACAGGA AG

SEQ ID NO:497: (Length of Sequence = 273 Nucleotides)

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GATTTATTAA GTATCCCCGA AAATATAAAC ACAAAACAGT AAAAAACAAA ACCGTAAAAC GTCAGGCCTG GAGCTGCAAT  
 AAGACAGAGA CAGGAGCAGC TCACACGTGG CCTAGGTGGG GAGGACGAGG CCATAAATAC TGCAGGAGGG CGGCAAGGGA  
 GOCCTAGGGC GAGGGGAAAG CAGGGTGTGG GCAGCGAGAT GGNTCNNGG GTTTAGACAC TGCTGGCTTC GGNCCCGGCC  
 GGCACCANGA CTCTCACTTC CAGCTGCGAG CAG

SEQ ID NO:498: (Length of Sequence = 319 Nucleotides)

ATTCCTCAAAA ATAGAGTCTG GACCTCTTAC CGCTACAAAT TCCAGGTCTT CAGGTACAGC CTGAGAGTAT GCAGATATAA  
 TACACCACAG ATGATTCTCT CCCTTTTTGG TTTTTTTTTT TTTTTTTTTT TTTTGAGACA GAATCTCATT CTGTACCCCA  
 GGNITGGAGTG CAGTGGGCTG ATCTCGGCTC ANIACCTCTC CCGCCTCNG GNTTCAAGCA ATTCTCTCTG CTNAGCCTCC  
 CGAGTAGCTG GGNCTACAGG NGCACCACCAT CATGCCCATC CAATTTTGTG ATTTTAAGTA TAGTGGGGT TTCACCATT

SEQ ID NO:499: (Length of Sequence = 408 Nucleotides)

GAGAAATACC TAATGTGAAT GACGAGTTGA TGGGTGCAGC ACACCAACAT GGCACATGTA TACCTATGTA ACAACCTGC  
 ACATTGTGAC ATGTACTCTA GAACCTAAAG TATAATAATA AAAAAAGAGA ACCTTTAAAA AAAAATAGAC TGCCAGATAG  
 ACTAATAAAT AAAAAAGAGA GGTGAAATA ATCATAAATG ACTAAGGGGA TGTACCCCA CAGAACTACA AAAACAAAC  
 AAAAAACCT CAGAGACTAC TAAACACTC CTATGCACAC AAAGTAGAAA ACCTAGAAGA AATGGGTAAA TTTCTGGAAA  
 CATAACCCA CCGAAGATTG AACCAGGGAG AGATTAAAGC CCTGAACAGA CTAATAATGG NGTTTCAAAA ATTGAATCAG  
 TAATAAAA

SEQ ID NO:500: (Length of Sequence = 474 Nucleotides)

TTTTATTTT TTCACGTGA CTGTTTTNA TCTTTGATTG ATAAAAATGA AAATGCCAAA ATGAGGGTTA GCTTAATTTA  
 AAGTATAAGC GTAGTTAGCA GCTTTTNTA ATCACTCTG TCCATTTAAA AAATAATCCT CATAGGAGTA TAAACAGAGG  
 AAGGAGAAAT GGAGGATGGG CTTAAGAGAA AGAGTATTTT ACAATGTCT GCATAGCAAA TTCAATTCAT CTACCTAGTA  
 GCTCCTCCG TGTAACTTA CAGGTGTCT CCCCTCCAAA AAAAGCATC TTTTAGGAAG AAACACCTT AACACTACCT  
 TTAGANGATT GAACCTCCAG GGATAGGTG TTTGAGAGAA TCACCAAAAG CCATTTTAA ATGAATTTT AAATTACGGC  
 TTTCTCATTC CTATATAATAG TGTAGCAGCC ACCCTCCCTC TACTATGGAA CTMTTAACCA ATAATCCAAG TCCT

SEQ ID NO:501: (Length of Sequence = 378 Nucleotides)

GTTGGGGGG GGCCTGACC TGTGATCCG CCGCCTCAG CCTCCCAAAG TGTGGGATT ACAGGGGTGA GCACCGCACC  
 CGGCCCTGT GTACATTTT ATAAGAGAAT TTTTGTAGCT AGGAGTTCAG AATTTTAAA GTACCATTG AATGATCTTA  
 ATTTTNTTT CATGACAACA CATTCCAAA TGAATCATGC TTATGTACTA AGAGGGAAA TGTATTTAAG NTAAGGGTGA  
 GAGACTTAAG TTATAGGTGA CCTTAGAGAC CTAAGGTGAG AGACTTGACA CATGGAAGGA GTAACATTAG GGTCTACCTC  
 TACCTCAATT TAGTTAGCGA TTTACTACAA TTTAGAGCT AACAAAAGTA AAAATAAA

SEQ ID NO:502: (Length of Sequence = 448 Nucleotides)

TTTTGGAGAT GGAGTCTTGC TCTGTGCCC AGGCTGGAGT TCAATGGCAC AAAGTGGCT CACTGCAACC TCCGCTCCC  
 AGGTTCAAGC AATTTTCTG CCTCAGCTC CCGAGTAGCT GGAATTACAG GCACAGCCA CCATGCCCAG CTAATTTTGT  
 TATTTTAGTA GAGACGGGG TTTACCATG TTGGCCAGG TGGTCTCAA CTCTGAACT CAGGTGATCC ACTCCCTCGG  
 CCTCCCAAAG GGTGGGATT GCAGGCGTGA GCACCAGNC CAGCCATGAT CCTTAACTT GTTTAAGAG GTATAATAAC  
 TGGAAATCAT GATGCTCTT AAGGAATACC AATTGGATGT ATTATTGATG TATTTAATTC CATCCATATG NAGTAGAAAC  
 AGTTTTCATT AGCAGAAGGC AATTATATTA TAGCTACACA ATATAAAG

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SEQ ID NO:503: (Length of Sequence = 446 Nucleotides)

CTACAGTACC CATCTCCATT TTCAGAGAGC TCCGATGGAA ATTTCATGA ACTAATTCTC CTGCACATAC TTGGGTACAA  
 GTGGGCTACT GGAGCCACCT TCCTTCGTTC AATCAAACAG CATTATTTCA GCTTATTTAA TGAACACTAT CCAAGATACT  
 TGGGGACAG AAATGAAAAG ATGGGGAGAC CTGTCAAACA TATGGTACTA TGTCTATGCA AAATAACATT GGAATGTAGA  
 TTCACAGTGG AAGGCAGGGC AGGCATGGAA GAATTCAGAG AATGAGTGTG ACAGCTCCTA CCTGTACAG CTCTTCAAGC  
 TCCTGCTGGA AGCGGTCAGT CAGCAAATCT ACTAGCTGGC TGGGGCAAA AGTCGCCCCG GCTGGAGGAA AGTGAATTCC  
 GGGATTACA GAGCAGGTAG AGGGCATGGC GCCCAGCCCT CAAGCA

SEQ ID NO:504: (Length of Sequence = 248 Nucleotides)

TTGCTCTTCT TTTCTACCAT GGAACGTCC TTCTCAGGGG ATTTCNAGGT CTGGTGTCTT CTGTGTTTCT NAATAGGCAG  
 TTTCTCGCTG TGGGCTAAGG GCTTATCCAG GNCATATCC AGAGCCCTGT AGGGGTCTGT GGGGTCTTTG TCATCTCGT  
 CGCTGGGCAG AGCATCTCA GGCATCTCT CTGTNACGAT GTCCACCTGC TGGGCAAGGG CGATGTCTC GTGCTCTCC  
 GTGGGCAA

SEQ ID NO:505: (Length of Sequence = 367 Nucleotides)

GCTATGTTGC CCAGGCTGTT CTCAAACCTC TGAGCTCAAG CAGTCTCTC ACCTGTCTCC CAAAGTNCCTG GGATTACAGG  
 CATGAGGAC TGTCCTGGGC TTACTAAATT TTAAGAGATT TGTGTGAAC CATCTGCTGA TCATGGAGCA GCAGAGAAAT  
 TTATTGACAG ATTTTCTAGG GTCATCACTG ATGACAATCT GATGCCAGAA CAAGCCTGTA ATGCTGATGA AACATCACTG  
 TTCCTGGCATT ATTGCTCCAG AAAGATACTG ACTACAGCTG ATGCAAAGGC CCTGTAGGC AGTAAGGATG CCAAGGACAG  
 AATAACTGTT CTGGAATGTG CTAATAATGC AGCAGGCATT CAATAAG

SEQ ID NO:506: (Length of Sequence = 419 Nucleotides)

ACACCTGGTG ACTTTAGCTA TGCCATATCA AAGCCTGAGG AAACAACCAG GTCCCCAGAT GAAGAAGATT ATGACTATGA  
 GCTTATGAG AAGACCACCC GGACCTCAGA TGTGGGTGGC TATTACTATG AGAAGATAGA GAGAACCACA AAATCTCCAA  
 GTGACAGTGG CTACTCTAT GAGACCATTG GGAAACTAC CAAGACCCCT GAAGATGGTG ACTATTCTTA TGAAATTATT  
 GAGAAGACCA CACGGACCCC TGAAGAGGGT GGGTACTCAT ATGACATAAG TGAAAGACC ACCAGCCCC COGAAGTGAG  
 TGGTTACAGC TATGAAAAGA CTGAGAGGTC TAGAAGGCTT CTGGGATGAC ATCAGCAATG GCTATGGATG GACTCTAAGG  
 ATGGTTGGCC ACACAACTT

SEQ ID NO:507: (Length of Sequence = 417 Nucleotides)

GAAACTATT TTAATTAAAA AATATTCIAT TACTTCAATG TCATGTCTGT TGAACGAGGA ACTCAACATG CTTATTINCC  
 TTTGGTTCCA AGAAAAACCC AAGTCTAACC AAATGTATGC CACAAGGAAC TGCCAACIGG GTTAAAGCTT GGTATTTTCC  
 TGGTTATCAC CCTATTTCCT GGTGTAGGAC CTGGGGTTTA ATAGAGACAT TTACATAAAA AAGGTATTTG GTTAAAACAA  
 GAAATATGCA TGCNCTTCCT TACCACCTTC CTGGGAAAGA ACTGCTTTTT TNCCTTCTT TCTGTGAATC TTGTTCAAGA  
 CATCTGTAG TTTAGATATA TGGGCTGCCT CTTTTTACC CTCAAGCTTT TAGGTGACAC TTATAAAGGT GAGCATATCA  
 TTCTATAAAA TGAAGA

SEQ ID NO:508: (Length of Sequence = 308 Nucleotides)

CTGTTTAGAA AAAAAAGTGC AGCTCACTGT CAGCACTCAT TGAATTTTGC ATAAACATGC TTTTGGAGC TGAAGCAAAT  
 CTGACTGATT TTCAATGTGA AAATAAATA TAAANCTGT TTTTCTAGTT ATTTATTAAC AGAACTAACA TCAGAATTAT  
 TTGAATCACC AGAATAATCA ATTCGGAAA AATCAGATTC ATCAGATTAA TCTTTGGCCA ACAACTGTTT AAGAACAATG  
 TTAACATCTG CATGGCAATG CTACATTINC TAGGATTTGA CATTTTACG AATTGAGGAA TTAATAA

SEQ ID NO:509: (Length of Sequence = 370 Nucleotides)

TTTTTGAGAC GGAGTTTCAC TCTTGTGGC CAGGCTGGAG TGCAATGGCA TGATCTGGC TCACCGCAAC CTCCGCCTCC  
CGGGTTCAAG CGATTCTCCT GCCTCAGCCT CCCAAGTAGC TGGGATTACA GGCACGGCC ACCACGGCTG GCTGATTTTN  
TATTTTATAGT AGACACGGGT TTTCACCATG TTGGTCAGGC TGGTCTCAA CTCCCGACCT CAAGTAGTCT GCCTGCCTCA  
ACCTCCCAAA GTGCTGGGAT TACAGGCGTG AGCACTTGGC CTTGGCCGTG ACTGATTTT TTTCATGTAG AATTGTCAAC  
ACGAGAGATC ACAAGTGGAG CACTTTGAAA GACCGTCGGT TGTGTGCACG

SEQ ID NO:510: (Length of Sequence = 446 Nucleotides)

TCCTTCTCT TACTTCTCT CCTTCCCTCC TTTCATATGA GAGACTCTAT ATGGAAAAGG AAGCTGAAGT GGCTGCACA  
CGATATAGAA AAGCCATATT ACTTTCCTAA GACTGGTAAT CCGGCAATAC CTAATGCAGC ACATGGCTAG AGACTCCACA  
TTTGCCCAAC TTCTCTGCTC ATCATTTGCC ACTGTTCTGT AAATTTCCCA GTCCCTCAGC AGAAAGCACA TGGCACCATT  
TAAATGGCT GCTCACTCTC TAAGGGAGGT CTCACAGGCT GGTAGTGAGC CTTGTCCCA TAGTGAAGTT CTCCACAAAT  
GGGAGACTT CTCCAGGAG GAGGGGAGGC CTGGAGATGG GCATGCAGTG GGCAATGTCA GCTGCCCTCC AGGTCTTGC  
TTGCCCTTT TCGCCCTGG GTCAGTATAC AAGCTTTCGG GGGACA

SEQ ID NO:511: (Length of Sequence = 354 Nucleotides)

AATACCAAAC TGAACAAACC TGCTCTTTT TGGTTAAAAC AAAAAAAAAA AAACAAAAC AAACAAACAA AAAAAATCAC  
ACAGTTTAAT AAAGANGCAA CTCTTCTCT TTAGGNGCAA GGACTACCAA TCTAATTCCT ATCTATTGAG CCCCCAAAG  
CTCCCTCAG AGTCTTTCTT CTCTTTATCA ACAGAAAAGT CTAGAATGAN TATTCACAGT TTCTAAGAA AACCAGAAAG  
CCTTTAAGCA GCATTAGCTG GNCATATTTC TGCTTCTAT AGTTACCATA GATGAGTACA GCTTTACACT AGGGGGCTGG  
GAGTTCAGAC TCACAGCAGA GACTNCTGGG GTAG

SEQ ID NO:512: (Length of Sequence = 374 Nucleotides)

CATGTATATT ACAA AAAAGT TCTGTACCA AAGTCTTAT TAGACTTTAT TTTTGTTTT TTAATTTTAA AAATTTTTTT  
TGTTTTTATT TTTATTTTT AAATTNCTC TCTGTGGT GACTGTCTG TGATTGTCT AGTTTCTGGA CCAACAAAC  
ACACTAATAA TTTTAAATCT GAAACAGTGA TTGTCCCTT NGGCTCATGT ATGTACAGGG TGATCAGAAG TGGTACCTGT  
TAGCAAAAGT GTCACGATC TGCACCTCTA CCGAACTGA TACCCAGAA CTACGGAATC TAAACAGACT ACACCTGTGA  
ACTGCGTATT ACTGTCCACA ATGGGGATCT CCAAGACAA AAGAGGTATG GAAA

SEQ ID NO:513: (Length of Sequence = 463 Nucleotides)

ATCAGCAGAT TTNCTCTGG TGAATGTCTA ATCAGTGTGA TTTCCATAGG CTATACCTAC CTTTGGGGG CTA CTGCTGCA  
ATNATGTTTG GTCAGTATCC TTGCAACAA CAGAGTGACA GATTCTAAAA ATGACTTTGC AGGCCAGTAC TAAGAAAGAC  
ACCAAGGTTT ATGGGCTGC AAATAAAAAG TCCATAACTT CCTGCCCTA CTTACCAAG TGAAATCGAG TTCTCACAC  
TTCTGCACAC AGCTCTTTCA GGATCTTCCC TTCCCTTCAA GGCTGTCTGA TGTTCAGTTT AATTGATTG TATTGTATA  
AAGTGTGAG TGTGTAGTCC TCAAAGAAAT TTACTTTTCA TCTAANGCCC CTTGGGACA AGAAAGTGGC AACCAGGCAA  
ATGATGTATT ACTTATTGT TTGAGTATCA CTTTGTGATT GTCCAGGGC TGTATTACAC ATA

SEQ ID NO:514: (Length of Sequence = 396 Nucleotides)

CCAACCCAGA AAACGTTTCC TGGCTCTCTA CTAACAGTAA AATGTGCTGA GCCCAAATTT TCTGCTCTAA CATGGGTCCC  
ACGGACCTAT CAGTCTGCTC TGGGGTGGT ACCTGTGGG TCTGTAGCAG GGTCTTTCCC TAAGCATCAC TGTGGGTTTG  
GAGACAGCTG TAATGTGTGC AGCTGTGAGC AGAAAGTACA ATGCCACTGG GCTACATATG TCCATATCAT CCACCACCAT

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TTCCCACTGT AAAACCAAAG GCTGCAACTG TGAACAAATG TGGACTTCCT CAAAGGACAA ATGAGGAGAC TGAAGGCTAC  
ATTTCCTCTT TTGAGAAGCC ATTAGAGAGT GTCTACAGTT ATACAACAGG TTTCTGCAAG ACCCTGTGGG TAACTT

SEQ ID NO:515: (Length of Sequence = 416 Nucleotides)

ACAAACAA AAGTAGTAGC ATCTCTGTGA GAGGTACACA GTTAGAAAA TGATTCCACA CAAGAGTAAA GAGATTTACC  
AGGAAGAGTC TTGTTTTCTA AAAGTTGATA CAACTAGTAG AAAAATACTT GTCAGTGGTA AATAGAGCAG AAGTAGAAAA  
AGCAGTTAAT CTATTAGATC AGATCAGAGT GTAAGGCAGG TATATCAGGC CAAAGGTGAT AAGACAGAGC AGAAATAAAG  
TATGTTAAT TCATGCATTT NCTGACTCAT TTATTTATAC ATTGATACTG TCACCTTATAA ATCAAATCTT ACAGGTCAGG  
TTCTGTGCTA AGCTCAGGGG NIATAAAANG AAATANGTCA CTGCACTCGC CCTCAGGGG GCCCACCAGT ATAAGTGGT  
AGATAGTTCT ATAAAG

SEQ ID NO:516: (Length of Sequence = 368 Nucleotides)

CCCATGGAGC TCGAGAACAT CGTAGCGAAC ACGGTGCTAC TCAAGGCCCG GGAAGGTGGC GGTGGAAATC GCAAAGGCCAA  
AAGCAAGAAA TGGGGCGAGA TGCTCCAGTT CCTCAGATC AGCCAGTGGC AAGAGCTGGC GCTCAGCCTC GAGCGTGAAT  
ATCAGAGCCT GTGGGAGCGG CANCCATGG GGCCTGCTG TCCGAGAGT TCCTGTCCAC GAGGCGGAG CTNAGCCGCT  
GGTGGCCTT CCTGGATGGG GTGGCGAGT ATGAAGTAC CCCGATNAC AAGCGGAAGG CATGTGGGGC GCANTAACCG  
CAGAATTTTC TNAGNCACAN GGGTCTGAC CTCATCCTG AGGTTC

SEQ ID NO:517: (Length of Sequence = 393 Nucleotides)

CCCAGGCGCT GGAGAGCCAG CCTGCGAGG TGGGCTGGC GAGCCAACT GCGTTCCTGG TGCAGGGCTT CGGGTCTCCC  
TAACAGACCT TATAGCTGA CCGGGCGCG CCATGGCAGT GTCTCTTTC TCAGACATCC AGGGACGACC ACATTGTGTC  
AACAGGGTC GCTCCACCA TCTGGGAGA AGCGAATCT TTTCTCGCG TGCCCTGTCA GCGCTCATG GTGCCAGAG  
AGGAATTTTA GTGGCAGCAT TCGGCTGTC ACGNCACGA AATTNCCAGG CCACTCCAAG TCAGAAGGGA CCACCAGGAA  
AAGTCAGGAA GAGAACCACC ATCAAGGTCC CAGGCTCTT TTTGTGACA AGGACTTAGA GGGGTTTGGG TCT

SEQ ID NO:518: (Length of Sequence = 465 Nucleotides)

CCTTCTCTGC AGATAGAAGA GCCAGAATGG GAAAGCGAA GATCCATCAA CTTGTCTGAG CTCATTGATG TTTACAGTGA  
TGGTGTGAA CTACTCCAGA TGGTGAAGGC ACCAGATTCC AACTGCAGCA ACCTTCTGAT TACAACCAGA CAAAGCCTTG  
TNCIGCTTCG GGGGCAAAAT CTGACACCTT ACTGGGCATT GAGACTTCAA GCCTGTGCA GCAGCCTACT CTGGATATT  
TCACTGATGA TCAGACATTA GACTTCTTC TGCAGATACA GGATGGAGTT GGGATGAAA AGATGATGGT TGTGGATGGT  
GACTCTGGGC TCCATGTTT GGAGTTACCG TGCTCGTTG TCACATGAAA GAAAACGGC AGCCACCTCA GCAGTTACTT  
TCAGACCAGA AGTCTGTCTT TCTCTCTG GGGCGAAGG CTGTGAGGT TGCATCTTC CAAT

SEQ ID NO:519: (Length of Sequence = 382 Nucleotides)

GGCGTGGT AACAGAAAAC TCAGTGATA CTTGCTGTT GTTAGGTTGT CAATATAGTC TTTCTGTAGG ATGGATAGCA  
TGTTTGAGAG GTGCCAAACA AGAATTTTG GGGTTAGTAG TGTGCTGTG GGAGGGTATT ACAGGACTGT GTAATTATAG  
GACTCTAAT TGACATGGCT TGGCACCCAC TTGCAGCTAG TGGGTACAGG GTACAAAAGA GTTAGAGAA AAGCTCTACA  
GATTACGTAC TTTGTGTCT TCGTATGCTC AACACTGTCC TTTGTCTC CATGAAAGAT GAAGGAAGCA AATTTATGTA  
TGTTCTTCT TTGACCTCT TTAATCTCT GATACTTTT AGATTGCATG ATTTTACTAG GC

SEQ ID NO:520: (Length of Sequence = 304 Nucleotides)

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CCAAGACTGC TGATCTCTAA ACAAGCATCA AAACCCGAAG CTCATTAACA TCAGAGTGAG CTTCAATAAG GTGANCACTA  
CAATGAIGTA CAATTACATC CTAATANTTC ANTGCCCAAG AGCCCTGTAG AACTATTGCA AGGCCAGGN TTATCACAGT  
ATGCAAATGC ACTAGGAAAA TCATTACCTA TTTAGTCCCC TTTATTTTGG TGGGTTTAAC ATGAGAAGAG TAATCCATGC  
TACAAGACGA GATTTTCATT TACAGCTGTA GTAGCCAAGT GCATAAAAGC TTGANTCTGT CCGA

SEQ ID NO:521: (Length of Sequence = 360 Nucleotides)

TTGAGACGGA GCTTTCCCTG TCACCCATGC TGGAGTGCG TGGCGCTATC TCAGCTCACT ACAACCTCCA CCTCCAGGT  
CCAAGTGATT CTCCCGCTC AGCCTCCCAA GCAGCTGGGA TTACAGCGT GAGTCACCTG CCTCAGCCTC CCACAGTGCT  
GGGATTACAG GTGTGAGCCA CTGCGCCAGG CCTCCCAAGG TGTTGGGATT ACAGGCGTGA GCACCGCTCC GGGCCTCCCA  
CAGTGCTAGG ATTACAGGTG TCAGCTGCTG CACCTGGCAA TTTTITGATA TTAGGTCCCC TGAAGTCCAA AAAGAGATAT  
ATGGCTTATT TGGTATAATG AAATCATACA GGAAGGCATT

SEQ ID NO:522: (Length of Sequence = 287 Nucleotides)

TTGAGGAAGT TCTGTGCTG GTGAGGAAAT TCINTGAGT TCTGTAGGAA TTTTATAGC TTGTTTGCA TTCAGTTCTA  
TCAACAAGCC AGCAGCAACT CAAAGGGAAG CCTCTNCTG GCATATCAAT CACACAGGCA CATAGGATCA TATAGCATAT  
AGGATCAGTC CCAAGAAGAA CTATNGGGIN GGGGAGAGGT TTTTCTTCCA CTCTTGGEN TTCAGTGACT TTGAGATGGA  
CCTCTTTTTT CNNTGGACA AAATGTCATC ACACCAACAT CTTATTG

SEQ ID NO:523: (Length of Sequence = 318 Nucleotides)

CCTTGCTCT ACTAAAAATA CAAAATTAG CCGGGCATGG TGTCACGTGT CTGINATCCC AGCTACTCGG GAGGCTGAGG  
CAGAAAAATT GCTTGAACCT GGGAGGCAGA GGTTCAGAC AGCTGAGATC ACTCCATTGC ACTCCAGCCT GGGCAACAAG  
AGCAAACTT TGCTACAAG TCCTCTACG CTGACAGGTC CTCACTCACC TGAATCTTTT ACGCCAGCAG CGTCTCTTCA  
CTGACGINCT TCINCATGCC GGAAATAGGA CCTTCCCTTG CCANCGGCA GTGCTGGCTG CATGCAGTCG TTACTTTT

SEQ ID NO:524: (Length of Sequence = 238 Nucleotides)

ATCTCATGG AGCCAGGGTT CAGTTCTCA TGCAAGTCGG CCACAGGAGC CACGGAACCG CAGTAGGATT TCTACTGTTA  
TACAGCCCTT GAGGCAGAAT GCAGCAGAAG TTGTGGACCT TACCGTIGAT GAAGATGGTA AATTGAAGTA GTAACAGTAG  
AAAATTATGA AAGGAGTTTG ATAAAGGAA ATCTCTTAAT ATGCTAGAAA CTCTCCTGC TTACTGGTAA TATATTAT

SEQ ID NO:525: (Length of Sequence = 168 Nucleotides)

CCAATGAGTG TGGACCTAA ATTTAAACAG CTAAAGCTAT AGTCTAAGGA CAGTCTCAA TAAATACCTT TGAATTGTCA  
TATGGTCCCC AGGAGGGTCT TGTGGAAAGG GTTTCATGGT AGTGAAAGAT GTAATANTC TTTTTCCTT TTAACCTTAA  
GCTGTCC

SEQ ID NO:526: (Length of Sequence = 387 Nucleotides)

GGAGGTCACA CGGTGAAACA GACACAGTTA TATACAACAG GGCAGTTTTT TAAAAAGAGT TGCTCTCAGA CGCATTTTTT  
CTGCTCCCTA AAAAGCCGAG GAAGATACTG GNTCCACAGA AAGAAAAGGC AATGCCGTAA CATGAGGCCC TCATGGCCGC  
ACCGTCCAGG GGAAGGGCTG TTAAAAACAC AAGTATCTT GTGAAATACT TCGATCTGAG CATTAAGGCA GGTCTGCAAG  
AGATCCGTCC TGGGGACTCG GACAGCAACG CTACCGGCTC CGAGAGGACA GTTAAATGTC GCCTCCCGGC AAGAGGGGCG  
GAGAGATCAG ACAAGGAGTT GTTCTGAGT TNAACCTGC TACAACAGCA AACTCCAATA AACTCAA

SEQ ID NO:527: (Length of Sequence = 336 Nucleotides)



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TTTGCAGTTT TACATTCCCC TAGTACATCC CTGCTTACTC GGGAGCACAA AGCTTGGTTG TAAGAAATTG TGATTGGA  
 GTAGAGAAAA GCAAGGAAGT CCAACCTCAG GAGTGTCTCT GTTACTAAGA GGAGAGTGAG ATCCAGGGTG TGGGAGATGA  
 TCTGAAGGTC TATGGGTGGG GAGTGCCACA GGAAGAAGGG TTCTGGTCGG AGTTAAAGGA GGATATATCT ATATNCTGGG  
 AGATGAGCTG AATTCAGAAC ACATGGAATG GGAACAATTC TCCCCATACT GCGTTTAAGC CAAATTAGGC TGGCATCCCC  
 CACCAAGGCC AACTAA

SEQ ID NO:528: (Length of Sequence = 482 Nucleotides)

TTTACTCTA GCGTGAGGAG GGGGCTCCT AAGGAAAGTC ATGCTGGGTA AACTGTGCGA TGTTACAGAG CACATTGAGT  
 CTGTGGTCAT CGTGGTTCTT CTATCTTCAC TGTCACTGT ATCCTGTTAC ACATACTCAG TTCTTAATTG TAAGCTCAAT  
 TTGGGTATTA GCAAAGCAT CTGTCACTT TTCTCAATT ACTCACACCT CTCTTGCCT AAATAAAACA AAGAAACAAA  
 GAAACAAGT GTGGTGTCT TACAGTCTC GGGAGTTCCT CGTCACTGAC TTATATATA TANAANAAAG AATGCACATG  
 CGGGCCACGT TCACAGATAG ACAGATTAC CGAAATTGA GGAATGAGGG GCGTTAAAGG CTGCCGANAA NCAAAATGGG  
 GTGGAAATTA GCAANCGTTG TTTTCGGTC AATTNCCAAT TGTGCACTGG CTGCGTTGAG ACAAGNCCAT CTTCGAATTT  
 CC

SEQ ID NO:529: (Length of Sequence = 412 Nucleotides)

CTCTCAGACA GTATCCTCCT CGAAGCAGGA ATCCTAGTAA ATCTCATCTG CGGCATGCGA TTCTAGTGC AGAGAGGGGA  
 CCTGGGTAT TAGAAAGTCC TTCAATATTT AACTTCACTG CAGATCGATT AATTAATGGT GTCCGGAGTC CACAAACAAG  
 GCAAGCAGGT CAACTAGAA CACGGATTCA AAACCTTCA GCATATGCCA AGAGAGAGGC TGGGCTGGG CGTGTGGAGC  
 CAGGCAGTCT CGAATCCTCT CTTGGTTTAG GGAGGGGAAG GAAGAATTCC TTGGGCTACC GGAAGAAAAG GGAGGAGAAG  
 TTTACAGCA GCCAGACACA GTCTINCAAC GNCACCAAAG CCTCGTTCG CAAGCTTTCG AGCTGGGGGC TTTCCAGCT  
 TTCCCTCCAT TA

SEQ ID NO:530: (Length of Sequence = 301 Nucleotides)

ACTTTTAAAT AATAGTCATT TAAAGTGGGT GAGATAATAT CTCATTGTGG TTTTNAATTG CATTTCTCTG ATGCTTAGTG  
 GTGTGAGCA TTGTINCATA TAACINCTGG CCATTGTAT GTCTTTTTT TTTTTTTTT TTTTTTTTGA GATGGAGTCT  
 CACTTTGTCA CCCAGGCTGG AGTGCACTGG CGCAATCTTG GCTTACTGCA ACCTCCACTT TCTGGGTCA AGTGATTCTC  
 CTGCCCTCAGC CTCCAAGTA GCTGGGATTA CAGNGCCCA CCACCAAGCC CAGCTAATTT T

SEQ ID NO:531: (Length of Sequence = 312 Nucleotides)

CAGATGAGAC CAGGCCTTGA CAGTGGGGC AAGTCTACC AACCTGCACA GCACATCCAG CAGGNCAACT GTGGCTCAGC  
 AGGTGCCAAA TGGAGCCCAT GGGCAGAAGA TGCCACAGC GTTCCAGATG TGTTGGTCT GAGAGATAAA AGGACACAGA  
 ACAAGATGAC TGTGCAATA GCCAAGTGGT GGCAGAAGTT CTGCATTTCC AAGAGATGAT CCACTCAATA ATTTGACGAT  
 ACTAGTTGGC CAACATGCTC AGAGAAAACA GNCITATCCA CATCTGGAGC CTCATTCTCT CTCAGGATCA TT

SEQ ID NO:532: (Length of Sequence = 313 Nucleotides)

GCACAACTCT CGACCTTTGG GAGCAGCCAG GGAGGAGTCA CTGTCCAGC CCCCTGGCCT AGGCACAAAG GGGTGGGAGA  
 GACAGCTGGG CCAATATGGT CTATTACCG CTGAAACCCC GCGAACCAC CCTTAACTCT GCCTTCAGGC ATATCCCCC  
 ACGTCCATGT CCAGGAGCCC CCTACTGTG CTGGTCATCT GTGGCCGGG GAATAATGGA GGAGATGGTC TGGTCTGTGC  
 TCGACACCTC AACTCTTTG TGAGTATGTG GGGAGGGGCT GTGGGGAGG AGGGCGTTG GCTCTGGGA TCT

SEQ ID NO:533: (Length of Sequence = 376 Nucleotides)

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GTAATTCAT GTGGCTGACT GGGTAACAGA TTGAAGGGT ATCACAGACC TTCATGTTGT AGCTCATCGC AGTGTATTGT  
TTGTGCTTG TCCTGCTCTC CCGTTGTATT GCCATCCTCA AGGGCAAAGA CTGCATCTTT GTATTCCAG CTCCTAGGCC  
TGAGTCAGGC ACATAGTAGG AATTCAGAAA GTATGTTTTG GATGTAACAT TCCTCCTTTT TCCTGGACAA AATGGCCTTT  
TGTCGGTGC ATTGTCCTTT CCATAGAGGA GGGGTTGGG CAGGATTGTA AGATGACTGT GTTTGAATCT TCAGTTAGCT  
AAGACAAGGA TACGNTTTTT CCATGGTGCA AATCTAAAGG GTTCTAGTGA GGTGGTTC

SEQ ID NO:534: (Length of Sequence = 374 Nucleotides)

TTTTTTTTTT GTCCAAGGT TATCAAATTA ATTGATTTTG GGGGGCAAGA TAAAAATTTT NATTTGATTA ACTTTCTCTA  
TTGGTTTTTG TTTTCAATTT CATTATTTTC TTCTTTTATC TTTATAATGT NCTTACATCT GCTTGGTTTG GGCTGGGCAC  
AGGGGCTCAT GCCTGTAATC CCAGTACTTT GGGAGGCCAA GGTGGGCAGA TCACTTGAGA CCAGGAGTTT GAGACCAGCC  
TGGCCAACAT GGGGAAACCC CGTCTCTGCT AGAAATATAG AAATTGGCCA GGTGTGGTGG CCAGCACCTG TGATCTAGC  
TACTCGAGAG GCTGAGGCAG GAGAATGGCG TGAACCGGG AGGGCAGAGC TTGC

SEQ ID NO:535: (Length of Sequence = 433 Nucleotides)

TGCCGACTGA TTCCAAGTCC CCAGGAGGGC TGTGAATGCT AATAGATATT TGGGGTTTAT CTACATGGAT AAATCAGAAT  
TGTTAACATT ATTTATAAAG ATAATACTTA CATAATTTIN AAATTCACAA AGATTGTTTG GCTTAATGAT TTCTAAATGT  
ATGCAATATA ACATTAGGCG GCCTTTATTA ATTCTATTTA TGTAATGGAA AAGCTCAATT CAGCAAAAAA CAGATCTGAT  
GGGATTGGT TATCTCTAC CTGATCAGAA CAAAGCCTTA CTTTACATTC CTGACTACCG ATTGGCTGAG GGATTGTCTA  
ATAGAATGGA GCTTTCTTTT GAGCGGTATC CATGTGTACA AAATTGGGCT GCTTTACCTG TGACCCACCG ATTGCTGGAG  
GAGCTTGA AA ATGTAGTCAG CCGTTCTTT TGG

SEQ ID NO:536: (Length of Sequence = 438 Nucleotides)

GATGAATTAA GAGGGAAAT TATAAGTAA AATCTTTAGC GCTGTGATC AAAGAGTTC AGGCCGGCG TGGTGGCTCA  
TGCTGTAAAT CCCAGCACTT TGGGAGGCTG AGGTGGGCAG ATCAGGAGT CAGGAGATCA AGACCATCCT AACACGGTGA  
AACCCCATCT CTACTAAAAA TACAAAAAAT TAGCCGGGCA TGGTGGCAGG TGCTGTAGT CCCAGCTATT TGGGAGGCTG  
AGGCAGAAGA GGAATTCCTG CAGCCCGGGG GATCCACTAG TTCTAGAGCG GCGCCACCG CGTTGGAGC TCCAGCTTTT  
TTGTTCCCTT TAGTGAGGT TAATTTGAG CTTGGCGTAA ATCATGGGTC ATAGCTGTTT TCCTGTGTA AATTGTTATC  
CGNTCACAAT TCCACACAAC ATACGAGCCG GAAAGCAT

SEQ ID NO:537: (Length of Sequence = 316 Nucleotides)

TAGTAGCACT AAAGCCCCGT TTGGTCACTA CTCTACCTA GGTGAGAAC TGACCAAAAA TGTGGAATTA TTAACAAAA  
TGATGGAAG CCAATGINCT GAACTGAGC TCTTGCACTA GGCCCCACA GACCAAAATTA AAATGGAGTC ACTAGTGCTA  
AATGCTTTGG AGTCAACAG AAATGTTAAA GAAGATAGAT CCCAAACAG AGCAGTGTAT TATTTTCTC CAGAAAACAG  
GAGATCCAG CATAATAAGA AAGTCTCTC TGTGTAAAC CTTACAAAAA AGTAACCTGA AGTAACCATT TTTTTT

SEQ ID NO:538: (Length of Sequence = 303 Nucleotides)

ATCTTCATGG GGTCTCTAAC TGTAACAAAA ACCCCACAAT TTGAACAGAA GAACAGAAGT ATCTGGTTAC AGAAGTGCAT  
TCATACATTT CACAAATGTT TCAGTATCCT CTCTCCCGG ACCCCAGCAT GAGCTTTAAT TGGATGTATT TATCTTTCA  
CCAGCATGCC CATGAAGNG CTAAGGAAAA CATTTACCA GTCTGTTTCA AAATCTGTCC TTGGCATATC AAATTTTTT  
TCTTCTTTT TCATGCTTTT TTTTAAAAA AAAACAGGA GAAAGCGAAT AGAGAGGAAA GAG

SEQ ID NO:539: (Length of Sequence = 262 Nucleotides)

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CATGTCATAG TGGCCTGCTC TCCTAACACA GCACAATTIA GGGCATATTT TCATGATGGT CTATCACTGG ATTACAACAC  
 ATCTCTTCAT TAAAGTCTTG GGAAAGAGGC TTCAACTTIN CTGTGTGAG AAAACTTCAC AGGTGTGTAA AGTTTGATCA  
 GTATGTATAA TATATTINAT TACATATATT TNATTINAT TTTTCATTTT TTGTCATACA TAGCAGGTGT ATATACTTAT  
 GGGTTATATG AGATATTTTG ATAAAGGCAT GCAATGTGTA ATAATCACAT CAGGGTAAAT GCAGTATCTA TCCATCACCC  
 CAAGCATTIA TCCTTTGTGT TACATACAGT CCAATTACAC TC

SEQ ID NO:540: (Length of Sequence = 416 Nucleotides)

CACCAGGGAG AACCAATACA ACAGAAAAAA AGCAGAGAAC AGCTATGTGT CCTGCCAGGT CTACCAAAGA TAGTCATCCA  
 AACATGAACA GATGAGAAGG CTGTTTTTCA AGAAGGTGAA AGTGACAGAN TATTCAATGA ATCTGAACAC ATGAAGATAC  
 TGAGACACCA GTAGTTCAGC AATAAGTGA GAGAAACTA AGCAAATGAG AAACCTAGGA ACAATTATGC AGCAAAGAAC  
 AACTGGATAA GCTGAAAAGT GTTTAAAGAT GCTGCCGTAA AACTAAGTA TCACAATCAA ATTCTGATTT GTAAAAATAG  
 AGGTATGGGA AGGGTACANG TAGTTTTGTG GGGCAAAATG GTGAGGAGAG CTTAAACCTT CTTCTTCCTT AATGAGGAAT  
 TAAATAATCC CATTAA

SEQ ID NO:541: (Length of Sequence = 341 Nucleotides)

GAAATACTTC CAGGCTTTOG AAAGGCCATC CTTTGGACAC ATGTAAAAAG CTGTCTTGTT GGCCCGTAT TOCCACTGAC  
 CCGTCTGAGT GATCACCAG GAGCGGGGCG GCAGCAAGCA GAGCTACCG GATTTGGGAC AAGGATTTTA AAGGCAGCTA  
 CAAAGCTGAG CTCTATTTGC TGATGATAGT CTCTGTTTCA CTGTTTAAAA TGACTGTCTG ACTCACCATG GTAATTTTNC  
 ACAAAATAAA AACACATTTT GGGTTGTGCA ACAGTGGTTC TCATCTTTCC AGGCAGGCAG ATTATTTTAA TGCTGTTTAT  
 ACAGGGAATT GGGACTCTCG G

SEQ ID NO:542: (Length of Sequence = 334 Nucleotides)

TTGTGTTTC CTACCTAAC CAATACCTCC TGGAAAAAG AGTATTGGT ATAAAAATA ACCATACCCA AACATTCCCA  
 CAACATGACC TTAATAAGCT GGTGCACAGT AGATTATGGC AGAGGAAAGA AAATTGACTT TAGAATTAGA GAAACTTAGG  
 TTCAAATCTC AGCTCTGTCA TGCTTTGGTT GACCTTCAGT AAGTCCCAT TNCCTCATCT GTAAATGGG AATAACATCT  
 ACTCCACAGC ATCATTAGAA AGATTAAATA GTGGCTGGGC ATGGTGGCTC ATGNTGTAA TCCAGCACT TTTGGGGAGG  
 CTGAGGTGGG GGGG

SEQ ID NO:543: (Length of Sequence = 350 Nucleotides)

ATTGTGTTGC AATTGACAAC ACCTCATIAA TTGTAAGCCC AGTGACCTG CTGCTGTTT CAAGTCACIT TTAATTTACA  
 CACGTGCTAC TTAATCTTAA AAGCAAAATT AAACATTGGA CTGGTTTACA TTTCAAGCTA CAATATGGAA CCATTGTATT  
 TGGAGGAATG AGTTTAATAT GCATTGTAAA ATAAATTAG GGGGTACTTT GCATTACAG CGGCTTATGT AATTAGGTTT  
 AGTCAACTGT AATGTTTCAG GTTAATGTCT TCCATGGATG TAGCTGTGT AAATAGTGAA CTTACATATC CCTTAATACA  
 TCIGAATTAT TACATAAATC CTTAATATTA

SEQ ID NO:544: (Length of Sequence = 328 Nucleotides)

GGGAGACGAG AACTCTTGAG ATCCGGGGTC ACCTGTNAGT CGCTGGACCC AAGGGGGAAG CGTCTTGATT CCTGGAGGAA  
 ATCTCCGAAG TGATGTGTAA CCTGTGTGT CGCCTGCACT TGGGCGCAA CTGCCTTTGG TTCAGTCCCC TGTTCCGTGA  
 GGAGGCGGGG ATCATGTAAAC AGTGGAGCAC ATCGCTCCCG GCTTGGACGC CTTTACCTT TAAGTGTTC TGATTTAGTT  
 TGGCTTTGGG TCTACCAAGA ATTCTAGTCA GTTAACTAGC TTTTAAAGCC AGGTTCTTGA ATTGGTIAGG CATGGACACT  
 CCCAGTAG

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SEQ ID NO:545: (Length of Sequence = 342 Nucleotides)

GGGCTATTAC CTCTGGGCAC TGGGAAACT GGGAGACGGG ACAAGGGGTG ACCAATTTT CAGTGTATGC CCTTTTCGAA  
 GTGTTAAACT TTTTTTTTTT TTTTGTGAGA CAGGNTCTCA CTCTGTGACC CTGCTGGAGT GCAATGGTGA GATCGTAACT  
 CACTAAAGCC TCAACTTCCT CGGCTCAAGC AATCCTCTCA CCTCAGCCTC CTGAGAAGCT GGGACTACAA GTNTGTGCCA  
 CCATACCTGG NTAATNTTA AAGTTTTTGT AAAGATGGGG GTTTTCGGAT GTTGCCCAAG CTAGTCTCAA ACTNCTGGGC  
 TCAAGTGATT TGCCACCTT GG

SEQ ID NO:546: (Length of Sequence = 280 Nucleotides)

CTCGTAATGC CAGCATTTTG GGAGGCTTGA GGCGGGAGGN TCCCTTGAGC CGAGGAGTTC GAGATCAGCC TATGCAACAC  
 AGTGAGACCC CTATNCTAT TTNATTTAAA AAAAAA AAAAGGGGTC ACGTTTACTG CCACCATCCC AGGCAGAAAG  
 ATGAAGCCTA GAGCCTCTCA CTGCTTCTTA GTGGGTCTTG GGTGTGAATT TGCTGTCTTG GGTATATTTT TTGGCAGAAA  
 GCATCTGGCA TCAGGCACTG GTTCTCAAAG TCGGGCCCCC

SEQ ID NO:547: (Length of Sequence = 298 Nucleotides)

CTAAAGAGTT TCACATAGTG GCTCAGTCCA GCCTGTGTTG GATCTTGCCG GGGCCTGGGG CGGTGTGTC GGGCCTAGG  
 GGGATGCCTN ACCAACAGAG GCTCTNCAGG CTCTGAAGAT AAGCTGAGGG CAACAGTGA CAGAGGGGGC TGAAGTTGCC  
 TCAAGGAGGC TCTTATTCAG GAGCAAGTCT TGCTGGCTTC TNCAGAGGCT GGGGACCAGG TGGCCCTTTG GCCAGCCAGG  
 ACCAGCAGCN CTNACCACCT GCTGAGGGGC AGTTTGGGTC AGGGGGGNCA CATAGAGG

SEQ ID NO:548: (Length of Sequence = 311 Nucleotides)

GAGACAGGGC TGTTTCTGTC ACTACACTGG TCATCTGACC AACTTTCTGC AATGCTAAGA AGGTATTCTT TGACCAAACA  
 GCAGTCCACA TACAAGTTTA AAAGGGGGCC TGTTTATGTA GGAACAACAC TGAGGTGGTG CGTAGCAGGT ACAAGACGCC  
 CAAATATTTT CAGTTTATCT TACGGCTGGA CTCTTATCT CCCACACTGT TTCCTAAAGA AGGTCCACAT TATTTTGGNT  
 ACTAGCCTAG TTTAAGTGA GATACTGTGG GCAACTTNA AGAAATGACA TCAGGCACAC AGGCTGAGCT T

SEQ ID NO:549: (Length of Sequence = 387 Nucleotides)

TTTATTTTGG TGTAAGACA GGAAGCTGGA AAATACACTG TATTTAAAAT TTNCTTGGTT CCCCCTCACA TTGTGGAAAC  
 CCCCCTCCCC CAGAGCTAAT CTGTTCAAAC TCAAATACTT AAAAATTACA GCAGCCAAAC AAAAGCATGG GGGAAAAA  
 AACAAAAACA AAAACCAGAT GGAGAAGGTA GCCTGGGCCA GTAGTGTAC TTGGTGTGGA CGACTGAGGT GCTGAACAGG  
 AGCTTCTGTT TCTGTTTTTT TCTTTTCTTT CCTCCTTTCT CTTAGAGAG GGGATCTNGA AGTAGCTGGG TGTGTCCAGT  
 TTCATGAAGG CTGCTTCAAT AGCTTGGCTG AAGGAATTTT GAAACTNGG CACAGGAACA CGGGTTT

SEQ ID NO:550: (Length of Sequence = 377 Nucleotides)

CACCCCAAC TCTTCACCA GTAGGGGCC TGGCTTGCAA TTGCAGAAGA GCTTTCCCAT CCTGGGTGA GCATACCTAC  
 TGGTAGTGGC TCGTGATTC CCTGGGGAGG GGCTCCAGA GGTAACCAAC CAACCTGTG CTACTGCTAT GACCACAGTT  
 CTGCTTCTGC TGCCCTCAA CTGGGAAGA AACAAAGAGC CTGAGGGCTT TACTCAGCT TCTAGCACTA CGCAGTCACC  
 ATATAAGAG GAGCCAGTC TCTCTCTT GTGAACCTT GACCCCAAC TCTTCACCA GTGGGGCCCC CAGCTTGGGC  
 CAGCAGCACA GTGGCCCCAA CCCCTAGGCT GAACATTCCA GTAGCAGCTG CTCGGG

SEQ ID NO:551: (Length of Sequence = 320 Nucleotides)

GAGTTTNTGG TGAGCCGAGA TCAGCCATT GCACTCCAGC CTGAGCAATC AGAACGGTCC GGCTCCTGTT GCTGAGGAAG  
 CAGCTCTGGA TGACCTTCAT GATGAAATTT GCAGCCTGCG GCTCAGTCT GTTGTGCTT AACTTGTGCT TGGAGCAGAG

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GCTGTGTCAG GGCTGCCATG GGCAGGGCCG TGCTGGCTCC CTGGCCCACT GGGAGGAGGG TCTTCCATGG GGACGGACTT  
CAGCTGAGAG CCATGCCCTG GGAAATGTAC CTTTGGGGTC CACATGTTGG AAGATGGGGT GCTGTGAAGG CCACACC

SEQ ID NO:552: (Length of Sequence = 334 Nucleotides)

ACAAACTGAC AAGAGAAAAC AAAGAATTCT TTGGTGATCT GGACACGCTG ATGGGGCCTC TGACCCAGCA CAGCAGCATG  
ACCAATCTTG TCCGCTACGT TCGCCAAGGA CTGINTTGGC TGCGCATCGA TGCCCACTTG TTGTAGTGGG TGTTCTCAGA  
TCTCTAGCAT CACGACCCAT CACTCTACCT CTACCAGGCG ACTGATGGTC ACTGGTGGAA CTCCACTCAC TGGGGAACGT  
TCTCTTTGGT TATGTTTGGT TTTATGCTTC TTTTGTTATC TGTAAAAAAC AGAAGTCAIT GTAAGTTGAC ACTACAACCT  
AAGGGCAGTG TACG

SEQ ID NO:553: (Length of Sequence = 371 Nucleotides)

GAAAAGGGGA AAAATCACAA TATGTGTTCT AGACAATATT GGTITAGATT TTTTAAAGAT CTAAAATTCA ATTATGGAAA  
GCCAGCAGCC TGATCCAGTT ACTGTGACTA AAGCAATTGT CAGACCATCT CTAGTCAACC CCTTATGGGT TTTGCAATGT  
GTCTACCCCA ATTTTGGATC AGGAGGGGTC AAACAGAAAT ACAGCAATGT GATTAACTG CTCCTTTGCA AACAATATGA  
AAAGGTTTGT NCTTTCAAAG TAGATTCTAA CAAATCGTCT GCTCACTGTG GGGTAGCAAA GNGAGAAAAG CAAATCTTTC  
TATTAGTCTC AAGCAAGTCT TCAGATTAC ACACAATCTA ATGGAGGCAT C

SEQ ID NO:554: (Length of Sequence = 331 Nucleotides)

TTATGACTTT TTTCAATAAG GCTATTGTAT CAGCCTGINC TCTCGCTGCT AATAACGACA TACCCAAGAC TGGGTAAATTT  
ATAAAGGAAA GAGGTTTAT GGACTCACAG TTCCACATGG CTGGGGAGGT CTCACAATCA TGGCGGGAGG CAAAGGAGAA  
GCAGAGTCAC ATCTTACATG GCAGTAGGCA AGAAGAGCAT GTGCAAGGGA ACTCCCCCTT ATAAAACCAT CAGATCTAGT  
GAGATTTATT CACTATCAAT GAGAGGCAGC ATGGGAAAAA CCTGCCCTC ATGATTCAT TACTTCCAT TAGGTCCCTN  
CCACAATACA T

SEQ ID NO:555: (Length of Sequence = 305 Nucleotides)

GCTGGGACTA CAGGCGCCCG CCACCACGCC CGGCTAATTT TTTGTATTTT TAGTAGAGAT GGGGTTTCAC CATGTTGGCC  
AGGATGGTCT CGATTTCTG ACCTCATGAT CTGCCCCCT CGACCTCCCA AAGTGCTGGG ATTACAGGCG TGAGCACCGC  
GCCAGCCCA ACACATGGTA TTTCTGTCA TTTTCATTTA GTCTCTGGT TGCTGTGTGA TGGTCTCAGG CTTTATTTAC  
ATTTCTCCGA TTAATAACAG ACTTGAACAT TTCAGCACAC TTTTLAGGTT ATTGAATAAC CCTA

SEQ ID NO:556: (Length of Sequence = 318 Nucleotides)

CTTTTITGGT GATINCTAAG CTCGTGTTIN CTTATCCTAT ATATATATGT GGTITGGTTT NATTTTAGGA TTTTAAAGTT  
ATCCCTAATA AATTTTGAGA TGIGTTCAT AGCTAGCCTG TTGAGATCTT TINATATCA AAGTTAATAT CTGTGGATTT  
NTAATCATTC TTTCTACATA TTTAACAAAG TCATTAGCAA AATATTGAAC AAAACCTGTT ATTCATATCC TTAGATACAG  
AACATCAATA TCTGAGATA CAGTACATCA TCAAAATGTG GTCOCCAAAT GNGCAGCAAT TAGCATCATG TGGGAGCT

SEQ ID NO:557: (Length of Sequence = 349 Nucleotides)

GGAAGCAATG TGCTTCTTCT TAACAGAGAT ACTGCACTAT TCTCTATGTA TACTCACTTG ATGGCATGGT ACATGTCCTC  
CAGGATGICT TGCTCAAAGT CCTTGCTCC ATTCACACCT TTCAGATTTT TCGAAACTC CTAGAGACAG GCCAGTAAAT  
TTTTTCCCT TGTGTCAACA CTGAAGCCCC ACCTAAGGAA CTCTTGGGTT TTCAGTAAAT AGGACTTAGG AAAAGGTAAG  
CGAAAAAACC CACTTCCCCA CCCCAGTCCC TTTTCTAGGT TTGGGCCAGC CCTTCTTGA TTCTCTGGA CAGAACCCCA  
TCCATCAATG CCACTGGAAT CCTATCTCC

SEQ ID NO:558: (Length of Sequence = 279 Nucleotides)

GGGCCAGGCG CTGTGGCTCA CGCCTGTAAT CCTAGCACIT TGGGAGGCCA AGGTGGGCAG ATCACCTGAG ATCAGGAGTT  
CAAGACCAGC CTGGCCATGT TGAAACCCCA TCTTTACTTG TAATACAAAA ATTAGCTGGG CGTGGTGGTG TGCGCCTATA  
ATCCCAGCTG CTTGGGAGGC TGAGACAGGA GAACCTCTTG AACCCGGGAG GCAGAGGTTN CAGTGAGCCA AGACTGCACC  
ACTGCATTCC AGCCTGGGCG ACAGAGTGAA ACTGTGTCT

SEQ ID NO:559: (Length of Sequence = 278 Nucleotides)

GAGAAAGCCA AGAGCCATCT GGAGGTGCGG CTGGAGGAGA ACGTGAACCG CCGCTGCTG GAGGAGGGCA GCGTGGAGGC  
GCGCAACCATC GAGGAAGCCA TTGCAGTGCT CAGCGTGGCG GAGGAGGGCG CCGACCGGCA CCCAGAAAGA CGCATGCGGG  
CAGCCTTCAC AGCCTTTNAG GAAGCCACG TCOCGCGGCT CAAACAAGAG AACCCCAACA TGCGGCTNTC GCAGCTGAAA  
CAGCTCTTCA AGAAGGAGTG GCTCCGCTCT CTGACAA

SEQ ID NO:560: (Length of Sequence = 304 Nucleotides)

CAAATGTTAT TGGAAGTTAT CTAGAAGGCT CAGTAACCAG AACTTCCTTT CATTCGCTT TTCTTTTCT TTTTTTTTTT  
CTCTGAGAC AGTCTGGCTC TGTCTCCAG GCTGGAGTGC AATGGTGTAA TCTCAGCTCA TTGCAACCTC TGCTGCCCGG  
GTTTGTCGAA TTCTCTGCC TCAGCCTCCC GAGTAGCGGG ATTACAGSCA CGTGCCACCA CACCTGGCTA ATTTTTTTTT  
TTTTTTTTTT TTGTATTTTT AGTAGAGCCG GGGTTTTCAC CATGTTGCC AGGCTAGTTT CAAA

SEQ ID NO:561: (Length of Sequence = 323 Nucleotides)

GATGGTAAAC ATAAACCCAA ATATATCTGT AATTACATTA AGTGCAAGTG AACCAAAACA GTTCAGATAA AAGACAGTAC  
CTATTCATA GCATTATGAC TATCATGAGG TAATATATGT AGAGATTAGA GTACACATGT CATATTAGGA GGTGTGCAAT  
AAATGATACT TTATTCIGAA GATTAACATA ATTCATACTT AAAAGGATCA AGAACTAGAA TATTAAAAAA NTAGAATGTG  
AATGTTCTG CAAGTTTTGA TAAGAACAAG CCCATAAATT AATCTCTAAT TTGCTACATT TAGGGAATAT GGGTAATGAC  
TAC

SEQ ID NO:562: (Length of Sequence = 214 Nucleotides)

TCTAATNAGG CCTGCGTGC TGTGTCATCC CATGGCGGAA GAAGGAAGGG CAAGAGTGGG TGAGATTGTN AGCAGGAGAG  
AAGGCTGAAC TTCATATTTT AACCACCCAC TTTCATGATT ATNATAATCT TCGCATTTAT TTTTTCGGT CTCTTCATGT  
NCTCTAATTT TTCTCTGGG TTTTGGTCTT TTGCTCTTC ATTTTAGAA GCTC

SEQ ID NO:563: (Length of Sequence = 358 Nucleotides)

TTTTTTTTGT GAGAAACAGA AGCTGAATAT CCTGATTGTA TTTGCCACAC AGGCGTTCAA TGGCTTAGCA GTGCTAAAGA  
TTTATTTTTA TTTTTTGGG CTCTGGGCTG ACATTGGAAA TTTTNCIGAA TGAGAAAAAC CATCCTCAAC CACTGTTTTT  
TAACACTGAG TAACTTTGGG AATTAACTTT TGCCACAGAC TTGAAAATGT TTCTTAATGA ATTTGACCTG AAATTACAAG  
GTACAACAAC ATAATATGGT AAATTCATTT CAATAAAAAC TAAAACTTAA GATTGTCAAG CTGCTTTATA TACTTNCGT  
GCTATGAGAA GTCAAAACAG CGCTGTATTG CCAAATCC

SEQ ID NO:564: (Length of Sequence = 405 Nucleotides)

ATGTACTGTG TGTTCATAC ACATGTTTCC TTTAGTCTTA AAATCTGGCT CATGGGGTAA AACTATTAT AATCTCCATC  
CTCCAGATGA GGAAGTGAG ACTTAGAGGT TAAGTACATT TTAGGATAAA GTAGGGTATT TCGATAAATG TTTCAAATGT  
GTTCTGGTC TCTGAGGACT AACTCCAG GCTGCTGGG ATACAAAATA CCTTCTTT ACCATAGGAG CACTTGGGTA  
GAATATTTGC AGAAACAATA AACTGGCTGA TATTAAAGT TTTCTTCC TCTGACATTC TATAATTGA TTGACCTCT

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TTGCATTAA TTATGTTGAT TTTCCTTTCT ACCOCTTGCT TAGCTAAAAA TATACCCCTT CTNIGTCCAT GGACAGGAGG  
ATGGG

SEQ ID NO:565: (Length of Sequence = 196 Nucleotides)

CATCCACATC AGGCAAAGGC AAAGCAGGAC CTGAACCTCC CACCCCAAGC CCTACATCCA TGCAAGCCAG ACCAGACTGG  
GTCAGAGGCT AGAAGGGGNC TCACAGGNTT GOCTGGGGAA GOCTCGGCC AAAACCTGGC CTINGCTCCA GCCCAGAGNA  
CCCACCTGGG CATNAGACTT GCGCAGCGT AGGGGT

SEQ ID NO:566: (Length of Sequence = 275 Nucleotides)

TTGGAAAAA GAGAAAAAA AATTCTGCTT CATTTACGAA TGTTGCCAAA GGAGGCAAGT TTTCAACTGA AAACAAAACA  
TAAAGGTCTA TGTTGGATGCA GCCAAATGTT TCTCCATTTA GAAATCATC ATAAAAGGTG GCAGCCTTT TTTTGCTTGT  
TAACTATATT ACTTATAACT GGCTGCACCA ACATTTTCATC TCAATTTTTG GAGTGTCTCT TCTGATCAAT CCTAAAAGCA  
ACACAATCAT TTTAGAGGTT GCAGACTACA ACAGC

SEQ ID NO:567: (Length of Sequence = 349 Nucleotides)

CGCTGINTG TCCCACACAA ATGTTTAAGA AGTCACTGCA ATGTACTCCC CGGCTCTGAT GAAAAGAAGC CCTGGGCACA  
AAAGATTCCA GTGCCCCIGA AGAGGCTCCC TTCTCTCTGT GGGCTCTCCT AGAAAACCAG CGGGACGGCC TCCTGCTGA  
TACGCTCTAT AACCTTAGGG GGNCTCGGG CAGGCAAACT CATCTCGGTG ATGGCTGTAG ATGCTAACAC TGGCCAATTC  
AATGCCACAC CTACTGGTTA CCTTTGAGG GCATTTCTCC AGACAGAAGC CCTTGAAGC CTAGGTAGGG CAGGATCAGA  
GATACAACCC GTGTTTGCTCT CGAAGGGCT

SEQ ID NO:568: (Length of Sequence = 368 Nucleotides)

CTGGTAACCT CCCGATTGGN TTCCCCGOC TCANCCCTTT CCCAGGGCTA TTCTCTCCC ACCTGCTGCC AGGCCTTTCC  
CTGGCCATCC TGTTGTAAAT GTCATCCGCG CCTACTGTT ATGTTCTCCA CAGCACTTGA ACAAGACCCA ACATGCCTTT  
TCACTTCAAG GTTTATTCTT CTATTAGTTT TCCAGAGTC TGCTTCCCTA GTGTCCATCT CCCCTGCTCG AATGCCTCTT  
GAGAGCCAGT GCTTGTATTT TGGTCTTNGT GGTATGGGCC TGGCACATAG TAGGCAGTCA GCAGATATTT ATGGAACAAA  
CAATGAATT TGTGTGACTA TAGTTCAATG TTCATAGTTC ATTCATAG

SEQ ID NO:569: (Length of Sequence = 328 Nucleotides)

TGTCACCTAA TGCACAGCTG GGGCTCAGGA CACAGCTTTG CACACCCTAA GINTCAATA AATGCTAGCT CAGGGCAGAG  
CTTTGCATAC CCTAAGTACT CAATAAATGC TAGCTCAGGG CAGAGCTTTG CATAACCTAA GTACTCAATA AATGCTAGCT  
CAGGGCAGAG CTTTGCATAC CCTAAGTGCT CAATAAATGC TAGCTCAGGG CAGAGCTTTG CATAACCTAA GTGCTCAATA  
AATGCTAGCT CAGGGCAGAG CTTTGCATAC CCTAAGTACT CAATAAATGC TAGCTCAGNG ACAGAGCTTT GCATAACCTA  
AGGTGCTC

SEQ ID NO:570: (Length of Sequence = 313 Nucleotides)

CCCTAAAAGG CAGAGTGTCT TCTTACCTCC ACACAACCAC GCTAGCTCTA TAGCAGTGGT TCTTAACCAG ATTGAAATGG  
CTGAAATGAC AGACATATAT TTCAGAACCT GGATGGGAAG AAAGCTCAAT GAGATAGAGG AGAAGGTGTA AACGCATCCA  
AGTAAAGCAG TAAATGATC CAAGAGTTGA AAGATGACTT AGCCATTTTA AGAAGAACC AAACAGAACT TCTGGAAATA  
AAAAAAATC ACTACAGGAA TTTCATAATG CAATTGGAAG CATTAATTAAC AAPATAAACC AATCTGAGGC AAA

SEQ ID NO:571: (Length of Sequence = 338 Nucleotides)

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AGGAAAGCAG GGGTCTCAAT TCTGTACGAA AGAGGAGGGT GTTTTACTTC CTGGAATTAT AGAGGCCAGA GGTGTCTCTT  
 TTTCAATTTA TTGGGAAGGT TTATTTTAAT ATGGACTTAG AAATAAATAA CTTATTAAAG TGAAGGTTCA CCTGGAGCCT  
 TAGGCTGGCT GCTAAGTGTG AGTCTGGGCT GTTGAAGGGA CTGTNCTGTT CINCTGGGTC TCTGTAGGAG TTTGAAGGAG  
 AAGACTGGCC CCAAAGGGTG TTTGAACAGG TTAGATGTGC CCATTGGTTA GAACTTACTT GGATAGGGAG AAGGNTCTA  
 GGGCGTATCC ACAAACTT

SEQ ID NO:572: (Length of Sequence = 375 Nucleotides)

CTATTTCCAG AAGTGACAGC ACAAGTCIGA GTTGCTGTTT GGTCGGTGA CCTCAGACAC ACTAATTGGA ATTGAAAGCT  
 AAGAGTAAAA ATTTNCTGGT TACAGGCGAG TCATACTCTT GCAAGTAGTT AGCAAAGGGA GGCCCAAATT CTCAAGGTTG  
 TTGATGGGGA ACTTGCCACT AAGAGAAGGC AGAGAGGTCC CTAGTGGGTA TATTTNCTGC CAAGCCACTT GCCAAAGAAG  
 AGGAACCACA GAAAGAGAGA CATCATGACC NGGAGAAAAA TGTGACTAGA CATGCTAACC TCCAGGNTT TATATATGAC  
 TTGAGTCTGC TGTAATTGGC AGCAGAAATC CAAAATTTGT ATGGGTAGAC CACAA

SEQ ID NO:573: (Length of Sequence = 396 Nucleotides)

GAATCCCCAA AGGAGAGGAG CTAACCTATG ACTATCAGTT TGATTTINAG GACGATCAGC ACAAGATCCC CTGCCACTGT  
 GGAGCCTGGA ATTGTGGGAA ATGGATGAAC TAAGAAGCTT TGAGGCTACC AGGCAGGGGA GTCCCCCTAC CCACAANCTC  
 TTCCCTGAAA GNAATNGAGG GGGAGAGAGG GTAGCAGCCA GAGCCAGGAC CCAGGGTTGG GGCTGCCGGC TGACCCGGAG  
 CCCTGGAGC AGGAGGCTGG GGCAGAGGGC CCTAGGCCAA GCCCACCTG GGCACCAGG ACAATCCTCT TCCCCACCAC  
 CGGCCCTCAG GCTGGCATCT CTGCCCCAG CTTCCAGGAG GGGCCAGACA GAAGCAGCCA TTTGGCATCT CAGGTT

SEQ ID NO:574: (Length of Sequence = 373 Nucleotides)

CTAAACAGAT TTAATCCCT CCCAGCAATC CAGATTAAIT TAATATGCTT TCTTAACGGC ATTCCGCATT TMTCAITAAA  
 GCAAATGAAC GTCCATCCCT CTCTGATAAA TTAGGGCAAA AAAATTCATA TGTTTAGGGC ATAGGGAAGG AGGAGTTGTT  
 GGTCTTAAA AAAAAGAACA AAAAAAGTA CCGCAAATGG CGTTTCAAAG TCTAGACATC TTCATCATCA ACACAAACAT  
 TCTCTTCAC AAAGGGACCT CAAGTAACCT TAGGCTGGAG GACCCACCTG CGTATGTTTT TMTCTCATT CTTCTTTAC  
 CTTCCCTCCA GGCCACCCAA CCCACATTCA GTGGCCCAAG TCAGTGGGG TTT

SEQ ID NO:575: (Length of Sequence = 431 Nucleotides)

GGCCCCATTA CTTCTTTGCT TGCTACCACA ACAAGGTATA TTAGCCCTTG AAATTAAAGA TGTGCTGTC CCAGTTGTGC  
 TTGCTTCAC CTAAATGCAT ACAGTCATAT TCCAAAGAC TATATATTAG TGATATCTAT ATAGTTCACC CTTCATATAC  
 ATGAGCTCCC GTGTGTGGAG TGAACATAAT GCAGATATAA AATATTTGGG AAAAAATTC ATGTGTACTG AACATGTATA  
 GACTTTTTIN CTTGTATCA TTTCTAAAT AATACAGAAT AATAACCACT GTTTACATAG CATTACATT GTGTTAGGTA  
 TTATAAATAA TCTGTACATA ATTTAACTG TACAGGAGAA TATGGCATAA GNCATATGTG GATACCACAC CATTITTATAT  
 CAAGTACTTG AGGCCTCTGC AGATTGTGGT G

SEQ ID NO:576: (Length of Sequence = 410 Nucleotides)

GATGCAACA GCCCAAGGA GGGAGGTGGA AAGGCCAAGG GGCTTGCCCT CCTGCAAGCG CGCCTGTAAA CAAGTCCCCG  
 TGGGGTTTIG GGAGGTGCGC CCACATCTAA GACTGTGCGC CCTGCACTCC CTCTGGATGG CTGCGGAAT TTGGTCTTCG  
 CTGATCACA ATTCTGGAAG GGTGGAGAGA CAGTTGCTG GACAGCTGCC TGATTGGGC ATGACCCCTC ACGGGTGTCT  
 GTGGGCCAAC ACCAAACGCC AGCCTGCTCT GCTGGCAGGG CTCTACCTG CACAGTCCCT AGGGCTGCAA GAGCAAATGG  
 GGACCCCTGGC TNCCTGCTCT TNCAGGGCC TTGGTCAATG ACATCACCAC TTTCTTAGGA CAGCGTCTTG GGGAGCTACC  
 GGAACTTTCG



SEQ ID NO:577: (Length of Sequence = 405 Nucleotides)

GAATGAAAT GGCATATTG AACATAAACT TAGGGCAGAT TTTTACTACT TTTGAAAAA TGTGGGAAA TATTCTGTGTA  
 TGAAACGTAA AACAACTTTT AATTTTTTTT AGAAGTTGAG AGGATTCTAT TTTGCAAAGC TGTATTATGA AGCTAAAGAA  
 TATGATCTTG CTAAAAAGTA AGTACAACT GTAACATGTA TTTTTTTTTT AAAATCAATG CCTTINCICA TTINCTTCTT  
 TGAAATAGGT AAAAATATGT CCTTAGTAGT TCTTCCTAAG TGTATTCTGG AATAAGGGAT TTATCACTCA GACTGATGCT  
 AAGGACCAGC CTAGATTCCA TTGAGATTGA AACCGTAATT AGTGTTTTCT GCATGCTGCT GCTTTATACC AAGGGCAAGA  
 AATTG

SEQ ID NO:578: (Length of Sequence = 406 Nucleotides)

CGCTACAGGG GGGGCTGAG GCACTGCAGA AAGTGGGCCT GAGCCTCGAG GATGACGGTG CTGCAGGAAC CGTCCAGGC  
 TGCTATATGG CAAGCACTAA ACCACTATGC TTACOGAGAT GCGTTTTCC TCGCAGAACG CCTTTATGCA GAAGTACACT  
 CAGAAGAAGC CTGTGTTTTA CTGGCAACCT GTTATTACCG CTCAGGAAAG GCATATAAAG CATATAGACT CTGAAAGGA  
 CACAGTTGTA CTACACCGCA ATGCAAATAC CTGCTTGCAA AATGTTGTTG TGATCTCAGC AAGCTTGCAG AAGGGGAACA  
 AATCTTATCT GGTGGAGTGT TTAATAAGCA GAAAAGCCAT GATGATATTG TTACTGAGTT TGGTGATTCA GCTTGCTTTA  
 CTCCTT

SEQ ID NO:579: (Length of Sequence = 374 Nucleotides)

GTGGGCCTGC TCTGGAGTCC ACATTGTAA ATATTATGCT GCAGTAAATA TTAATCTTGA GAACTAGGTG ATATGGTTTG  
 GCTGTGGCCC ACTCAAATCT CATCTGAAT TGTAGTTCCC ATAATCCCCA CATATCATGG GAGTAACCTG ATGGGAGGAA  
 ACTGAATCAT AGGGCAGTGA TTTCTATGCT GTCCCTATAA TAGTGAGTTT TCACTATATC TGCTGGTTTT ATAAGGGGCT  
 TTCCCCCTIN CCTTTGCTCT GCATTTCTCT TTCCGGCCAT TATGAGAGGA AGGACATGTT TGCTTCCCT TCTGCCATGA  
 TTGTAAGTTT CCTGAGGCCT CTGAGCCAT GCTGAAGTGT GGAATTTAAT TAA

SEQ ID NO:580: (Length of Sequence = 396 Nucleotides)

CAGAATAAAC ATTTACTATT AGGAGAGTCA AATCATTTAT TTTCACATGA AAGAGATTAA GTAAAGCAGA ATCTTTGATG  
 GTCTGCTGTG AATCTCTGCC AGTGATTGAG AAATTTCTGA AAACCACTTC CAAATCAATT ATAATATTAA GTAAACTTTG  
 GCTTTAGGAG TAAGAGAGAG AAGGTCTGCG TCATGTTTGG GAAAGAATAG ATATGCCAC AATAATTAGT CTATTACTTG  
 TTTGAAAAGG GTGATTTCCCT CGTCAATTCA AAGTATTAAG CAAATAAGGA CATATTGAGT ATGTAATTCA TGGAAAANTA  
 AGNAACTTCT TACAGTATGA TTCTTAAAG ATTATGGATG CCATTATCCA TTTTGGAGTT GGTATTGAAG CTTATC

SEQ ID NO:581: (Length of Sequence = 449 Nucleotides)

CTGCTCCGTG GCTGTTTCAA AGACTGGGCG AAAGGCTGTC CGGAGGGCAG ACCAGGTGCC TTGCCGAGA GAAAACACCA  
 NAGTCTCCTG TTGGCTCATA AAGAAGTTTT TGGGATGGA GAGAATCCAG ACCATCTTGG GGCAGCCANG CCCTTGCCIT  
 CATTTTACA GAGGTAGCAC AATTGATTCC AACACAAAAC TCCTTCCCT TTTTAAAATG ATTTCTGTTT TAATGCCATA  
 GATCAAAGGC CTCAGAAACC ATTGTGTGTT TCCTCTTTGA AGCAATGACA AGCACTTTAC TTTACGGTG GTTTTTGTTT  
 TTINCTATTG CTGTGGAACC TCTTTTGGAG GACGTTAAAG GCGTGTTTA CTGTTTTTT TAAGAGTGTG TGATGTGTGT  
 TTTGTAGGAT TCTTGACAGT GCTGTAATAC AGACGGCAAT GCAATAGCC

SEQ ID NO:582: (Length of Sequence = 261 Nucleotides)

CCAGCAGGTC GTACTTGCA TGGCAGGGTC CGGACAGGG CCGGTCAGT GTGCTGAGCT TGGTGGCGGG CACTGGCTTC  
 GACAGTGGCA TGACCGAGG GAAGTGGCGG CGGAGGGCC TCAGGGGCT GAGCACGTCC TTGCAGAGG GCGGGAACGG

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GINCTGCTGG TAGTGGCCAA ANACCTCGAA AACAAATGGGC TNGCTCTTGA TGTACAGGTG GCGTTTATTT TCATGGATTT  
ATACACACTG GAAAAGCCTC T

SEQ ID NO:583: (Length of Sequence = 399 Nucleotides)

CCCAGGCCAC CATTTAAAGC AGCCATTCTT GCCAAGAGC CAACATTGAG GCCAGCCGTT GCTCCAGCTA ATGTCTGCAG  
GGCTCCAAGT GAGGCTATGG GGTGACAGA ATTACTGCTG CTAGAGCTAG GTGAGGACCC TGAAGTAGTG AGCACGCTGA  
GGGACTGCT GGATGTAGTG AGAGCATTGG TACCACTTGG TGTGTCTGA NNTGCCTAG CTGCAGCAGC TAGTGCAGCN  
AAATTCTGTA ACTGCATTGC ATTCAACCCT CCCATGGGT GGAGGCTGCT CAGGGTGTG AGGTTCCAG AGGAGGCAGT  
CTGCTGAAGG AGTGCTAAAT ACTNGGGTCC AAGAGTATTT AGACCAGCA GGTTCCTCCA CACAGATGCT GCGCTGATT

SEQ ID NO:584: (Length of Sequence = 441 Nucleotides)

GTTGTTTTTA AGGATTAAAT GAGATATTAC ATGTAATGTG CTCATCCCAG TGCCCAGCAC ACAAGAAATG TTCAATAAAA  
TAGGAGGCAT AATTGTCTG TTTGAATACT AGATAACCCT TTTAATGGAT ATTCTACAAT TATGAATCTA AGGTGCTTTG  
GAGGAGCCTA GGCAATCTAT TCCAAAATTA AATGTAAGGA AGGTACATGA GTAAGGGATG GAGTAGGCCC TGGACCAACA  
CTAGAGCTCC AAATTTCTTA AAAAGCTTGA GCTTCTTTTA CTGTGGCCAC GCCTATAATG GGAATAAATC TGGTCTTCA  
AACAGTCCCT CCCCTCTCTA AGCTCTGCTG GGGAGTAGAG ACATCAGCAG GCTGGTCTG TGNITAGCTC CTCCCCATCT  
TNGACTCTCA TCCCATCCCC TCTTCTCTAC TACCCATTCA G

SEQ ID NO:585: (Length of Sequence = 326 Nucleotides)

GAAATGCAGG TTCAGCTATT TNCCTGCTGC AGAGTCCAGT TAACAAAAGT GAGTNCCTGT ATAAAGAAAG TNATTTTTTT  
TTTTTAAATT ATTCCAAAGC TAGCTGAGGG GAACAAGTAC AGGCTTCTG CCTAGGGGTA TCACTTTGCT TTTGGAGCAG  
GAAGTAAGCA CTTTTAAAGG GGGCTTAACA TGAATGCCAC ATGGGGTCCG GGAAGTAAG CAAGTGCAGC ATCTACATGT  
TAGTTTGGTA CCTTATCTAC TAGGTAGTCA AGGTGGTGAC TGCCTGINTC TTTGTGGGGC ATGTGTACTT TGGGGTTGTA  
AATTGG

SEQ ID NO:586: (Length of Sequence = 431 Nucleotides)

GAACGAAGGA AAAGCATCAA AACCTACAGA GAAATNTTC AAGAAAAGA GCGGAGAGAG AGAGAGCTGC ATGAAGCATA  
TAAGANCCT CGGTCCCAGG AGGAGGCAGA GGGGATCCTT CAACAGTACA TTGAGAGGTT CACCATCAGT GAGGCTGTTT  
TCGAACGCTT GGAGATGCCA AAAATTCTGG AAAGAAGCCA TTCAACAGAG CCAAATTTAT CTTCTTCTT GAATGACCCC  
AATCCCATGA AATACCTGCG GCAACAGTCA CTGCCTCCAC CCAAATTCAC TGCCACTGTT GAAACCACCA TTGCTCGTGC  
CAGTNTCTG GGATACCAGC ATGTCAAGCA GGCAAGTGGG GTCTNCAAGC AAAACTGTGC ACTTCCCAAA AGCAAGTGCC  
TATGCTGAC ANCCCAGGCC TTACTTCCCA G

SEQ ID NO:587: (Length of Sequence = 338 Nucleotides)

CTCAAGCAAT TCTCCACCT CAGCTCCCA AATAGCTGGG ATCACTGGCA CAAACCACCA TGCCCAGCTA ATTTGTATT  
TTTTGTAGAG ACAGGGTTTC ACCATGNGC CCAGGCTGGT CTCAACCTCC TGGGCTCAAG CAATCTCTCT GCTCGGCCT  
CCCAAGTGC TGGGATTACA GATGTGAGCC ACCGATCCA GCCCCACACC CTCATTATA CCAATTACCT GCCAGTAAC  
TGTGGACTTT TGCTTCTCA CCCCTGCTCT GATCTGGAAG GAGAGGGATT ATGTTATAGC TTGTCAGCAC AGTCCCAAAG  
TTCAATATTT CTGCGGGC

SEQ ID NO:588: (Length of Sequence = 277 Nucleotides)

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AAGAACATTT AAGTAGTTCA TACAAAGAAA TATAAATTGT NCTTAAATAT ATCAAAATAT ACTCACCTCA TTCATAGTAA  
 AAGAAATAAA AAAGTGTGCT CTGATGACAT TTTTCATCTA TGAGATTIAC AAAGNTCTAA AAATTGAGAA TATACATTTT  
 CTATTGCCIT TGGATGGCAA TTTGGCAGTA ACTATCAAAA GTATAAATAT CTATACCCTT TGAGGTGTCA ATCTCATTTT  
 AAAGAATTTA TTCTTCAGCT ATGTACATAC ATGTAGG

SEQ ID NO:589: (Length of Sequence = 353 Nucleotides)

GTAATGAATT ATAAGAATCT GAATTGAGAG CTAAAATATC TGGGTGTGTAG GCCTACTCTG CCACGNTTIT NITATTTGCA  
 AATATTAGAG CTGAAGTACA TGACCTCAAA GGCTCTAACC AACTCCAAA CCTACAATTC AATGGCTGAC TGATATACAT  
 TGTATACTCT TAAAAACAA TTAAATCAA AGANGNTAAT AAATGTGTCA TGTATTATAC AACTATTATA CAGGTGTGTG  
 TGTATATATA TATATNTININ CACAGAGAGG AAAGACATCT ATACATAGNC ATAACCATCA AATCAGTCAG AATTTCCATC  
 AGACACTTIN CATTTCCAG GTCCATCAGA TGG

SEQ ID NO:590: (Length of Sequence = 364 Nucleotides)

CTCATATACA TAAAAGTGA TAAGAATCG AAAAGACAGC CAGGGGAATT AAATGCCAGT TGGGGCCAAC GGGGCCCTGA  
 TCAGGAAGA GGGGGCCCC AGCTCTCAAT CTTCACACAA TCCCTGCACC CAGGGTCACA GAGCATGCGC AGGTCTCTCC  
 CGCCCACTTC CGGGGCAACT GCCAACCACC GCGCAGGCTG AGCCCCAGGC AGGAAGCAGC CCACCTGGTG GGGTTGGGGT  
 ATGAGTCCTT CCTCGGGGG GCTCGGTGGG TCTTGAGTAT TCTTTGGCCG GATTINCTGA TCCGTCTGCT CCAGGTGAGC  
 TNGGGAAGGC CCCAGGAAA GGGCCANAAG GGCCTTTGCC AGGG

SEQ ID NO:591: (Length of Sequence = 311 Nucleotides)

GAAAGGGGAA TAGGGAGTTA ACGTTTAATC AATAGAGTTT GGGAGATGA AAACGTTCTA GAGATGAGTG GTGGTGATGC  
 CACATAACAA TGTGAGGGTA CTAAATACCA CTGAAGTGTG TGTTTAAAT GGCAAAAAGG GTAAATTTTA TGTATGTAT  
 ATTTTACCAG AATTTTITTT TTAAGCTTA CTGCATGGG ACCAAGCGTG GTGGCTCACA CCGTAAATCC CAGCACTTTC  
 GGAGGCCNAG GCGGGTGGT CACTTGAGGT CAGGAGTTG AGACCAGCCT AGCCAACATG TTGAAACCCC G

SEQ ID NO:592: (Length of Sequence = 358 Nucleotides)

ATTTTGGTTT CTACCCATCA TCTCTCTCTC AAAGGAACCA GGGTCTCTG GGGATTGGC TGATGCCAGG GGATGGAGAG  
 TGTCAAGTGG NCTGAAGGG GAGGCTGCA GCATGTGTGT GGCAGGTGAG ACAGACCCAA GAGCCAGCTT GGTGGGGCAT  
 CCTGGCTAC CTTGGGACA CAGTGAGCGC CGAATAAAT AACATCAGGA ATGENTCACA ACGCAATGAG TAAGGGGAAT  
 CTGAGTCTAT AGGGATACAG ACCAGAGGT AAATNGCCAT GGCCACCCAC TTTCTTACAG GAGAATGTGA CTAGTTGAGC  
 GTAGGAACAT GGAACAAAT GGTAGAGGTG GCTGACAT

SEQ ID NO:593: (Length of Sequence = 354 Nucleotides)

GACAGACTGA AGGAATATAT GCAGCTTAAT TTAACATTTT TTGAAATTTT ATATTGCAGA AGTTGTACAT ATTINCTGTT  
 GTGAAATTAG AAAGANTTGA CAGGCAAGGA GGGTGGTCTA CAAAGCACTC CATAGATCCA CCATACTGAG ACAATGCTTA  
 ATGCTTTGAT GGATTTATTT ATTINATACT TTCTATGCAT ATGCATGTAT TGTATAAATA CGNATGCATG GTTAAATAGA  
 AATGGTCTC CTGGTGTTC TGTATATCCA TTTATGTGTG TGAAGTAAAT CCCCAGAGG GTAGGTTTGC TTTTGCCTGA  
 GGAGTCTTTT GCTACATACT GGCTGTACAT AATG

SEQ ID NO:594: (Length of Sequence = 319 Nucleotides)

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GAACATGGCC GTGAACTGCT CGGAGATGCG CTTGAACAGC TCCTGGATGG CCGTGCTGTT CCCGATGAAG GTGGAGGACA  
 TCTTGAGGCC GCGGGGCGGG ATGTCACACA CGGCCACCTT CACGTTGTG GGGATCCACT CCACGAAGTA GCTGCTGTTT  
 TTGCTCTGGA TGGCCAGCAT CTGCTGCTCC ACCTCCTTCA TGGACATGCG GCCCCGGAAC ACGGTGGCCA CCGTCAAGTA  
 GCGGCCGTGG CGCGGGTCGC AGGCGGCCAT CATGTTCTTG GCATCGAACA TCTGCTTGGG TGAGCTCGGG CACGGTCAA

SEQ ID NO:595: (Length of Sequence = 370 Nucleotides)

GAAGAATANA AAGAAAAATC CAAAATGAAG AGTATTATAC AAGACAACTA GTCAATAGTC TTCAAAGTGT CAAGGTCATG  
 AAAAAATTGAG GAAGCATCCC AGACTGAAGG GACTATAAGA AAGTGACAA CTAAATGTAA TGGGTGATTG TGGATTAGAT  
 CCTGGAATTG AAAAAGAACA TTCATGGAAC AACTGACAAA TTGAATAAG GTCTGTAGAT CAGTAACAGT ATTGCATCAG  
 TGTTAATCTC CTGGTTTAGA TCATGTCCTA ATGGAAATGT TTGTACTAT TTTTGTGGA CTCTTAAGGA ATGTGGGTGG  
 AGGACAOGGA TGAGACCTAC TTGCATCGAC AACAGGCGT TCTACGGACA

SEQ ID NO:596: (Length of Sequence = 335 Nucleotides)

CCACAGAGCC CCAACTCCCC CCACAGGAGC CAGCTCCCC TCGAAGGCTT GGAGCAGCGG GCCTGTGACA CCTGAAGCCG  
 CCAGCTCGCC ACAGGGGCCA GGGAGCTGGA GATGGCTCC AGCGTCAGTG CCAAGACTGA GCGGGCCCTC CAGTGTGTGTC  
 CAAGGAAATG TAGAATCACT TTGTAGATAT GGAGATGAAG AAGACAAATC TTTATTATAA TATTGATCAG TTTTATGCCG  
 CATGTTCGT GGCAGTAGAC CACATCTGTT CGTCTGCACA GCTGTGAGGC GATGCTGTTC CATCTGCACA TGAAGGACCC  
 CCCATACAAG CCTGT

SEQ ID NO:597: (Length of Sequence = 336 Nucleotides)

CTCCTGAACA TCACAACTT GGTTCCTACC TACCACACGA GTAGCCAAAA GAAAAGAAGC ACTAATAGAG AAAGGGGTGT  
 CTCACACCAG ACAGAGGACC TCTGCTGTCA ATTAGATCCA GTATCATGAC CTAACCTTAA GTGTGGAATA GAGTTCAGAT  
 CTCTGAGACA CTGTGAAGAA ATGGATGGCT CATGTAACAT CTCTGATCCC TCAGTCCCCA ACCCTGGACG TGTTCATTT  
 ACAACATTCA TAGGAGTTAA CTTAGCAGTG TTGCAAGTTA AGGTTCNAAA CCAAATTATT TAATCAGTGT CCCCCAATA  
 AAATCACTTA TCCATTTTA TTGCTAGTTT AGTTTT

SEQ ID NO:598: (Length of Sequence = 402 Nucleotides)

ACCACTACAC AATATATCTA TGTAACAAAA CTGCATTCTT ACCCCTTAAA TTCATACAAA TAAAAAAAT TAAAAATAA  
 ATAAAGTAGG ACAATCCCC AGATAAATAA ATTAATAAAT AAATAAATAA ATAAATAAAT AAATAACTTT AGCTCTTGCC  
 TTCTCCTACA CATAAGTTAA TGTCTGATGG GGTTAGTGGT TATGCTTCTG TAACTATAA TCAGATGTAC TCTTGCACCC  
 AAACCTTAGAT GCGATTTTNC GTATACTGGA ATCTTTGCTA CCTGTATATA AACTGTGGAA CTGAAAATGC TGCATTGGGA  
 GCAGTCTGAT AGGNTCTGTC CTAAGGGCT ACTCTGAGGG GCTCTAGGGG CTTCACTCTA CAGGCCCCCA GGGAGGACTG  
 CT

SEQ ID NO:599: (Length of Sequence = 369 Nucleotides)

CTCAACAAAG TTTGGATTTT NTCACGATG ACTCCTTGGG TGAATTTTAA ATCAAGTTAT TTCAACCATT TTNCTCATAT  
 ATTTOGTGCA TCCCTATTCT GGTATTCACT GAATACATGG GAGAGGTATG TNATTCTCAG CTCCCACAGC CCATAAGTCG  
 GGGAACCCAG ACTTCATTCC CCTCTGCTCT AACTCAGACT GTGAGGTGAT TGAGGGCAAG ACTGATGAAT TGTTCCTCTT  
 CCTATCACTG GTGCCAAGCA CAGTAGTTGG CATAAAGAAG TTAATCAATA AAGAGGGGGT GAATTTAATG AAAGACAGAG  
 GAAGGNGGGA CCTGGGGGAA GAGGTGGGCA TAAAGTCAAG GTACAAACA

SEQ ID NO:600: (Length of Sequence = 342 Nucleotides)

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CCGCCTCTG GGTCAAGCA ATTCTCTGC CTCAGCTCC CGAGTAGCTG GGACTACAGG CGTGGCTCC ACCACCACGC  
 CCGGCTAATT TTGTATTTT NAGTAAAGAT GGGGTTCTC CATGTTGGCC AGGCTGGTCT TGAAGTCTG ACCTCAGGTC  
 ATCCGCCCGC CTCGGCTCC CAAAGTGCTG GGATTACAGG CGTGAGCAGN CGCACCOCGC CAGCTGCTTC TATTTTAATC  
 TGAAGTTGGA AACACCTTC TACTTTAAGG CACAGGATCA GGGTAAGAAC CCACATGTAC GAGCTAACAG AGCTGCACTT  
 CAAATTACT TAAGTTAATT AA

SEQ ID NO:601: (Length of Sequence = 319 Nucleotides)

AGTACTATTC TGCCATAAAA AAAAGAATGA GATCCTATCA CTGCAACAT CTGGATGGA ACTGGAGGTC ATTATGTTAA  
 GTGAAATAAG TCAGGCACAG AAAGAAAAAC TTGCATATT CTCACTCATT TGTGAGAACT GAAAATTAAA ACAATTGANC  
 TCACGGAAAT AGAGAGTATA ATGATGGTTT CCAGAGACTG GGAAAGGTAT TGGGTGGGG GCAGGGAATG GGGAAAGGTTA  
 ATAAGTACAA TGCAATGAAT ACGATCTNGT ATTTTACAGC ACAAAGGGT GGCTATGGTC AACATAATT TATAGTACA

SEQ ID NO:602: (Length of Sequence = 334 Nucleotides)

CACCCACAGA CTGCCAAGTG GGACAACITT CTGGCTTTTG AAAGGCTCCT TCTTCAGAGC ATTGGGGAGT CAGCAATGTC  
 CGTTGIGTTA AATCAGCTGC TGCCATGAT TAAGCCTGTA ACCCAGAGAA CCAACGAGGA CTACAGCCCT GAGGAATGC  
 TGATCCTTCT CATATATATT TATNCTGTCA CTGGAGAGCT CACGGTAGAC AAAGACCTGT GTGAAGCAGA AGAAAAAGTC  
 AAGAAAGCAT TGGCTCAGGT CTCTGTGAG GAATCTGGAT TGTACCTTT GCTGCAAAA ATTACGACT GGGGACTCTT  
 CAATTAATCT GACA

SEQ ID NO:603: (Length of Sequence = 410 Nucleotides)

TTTCAACATG TTAGCCAGGA TGGTCTOGAT CTCTGACCT TGTGATCOGC CTGCCTCGGC CTCCCAAAGT GCTTGTATTA  
 CAGGCGTGAG CANCCGCGCC CAGCCAGGAT TATTTATTTT TAAATCAGAG AACTGAGTA CCACCTAAAG GGACTTAAAT  
 TATGCAATTG GAATGAACT AAAGTGAATT GAACATTAG TTTCATTAG ATTTTATTTT TCTGCCAAC TGTATATGA  
 GAGTTTGAGA GGGAGCCAG ATTAGACTTA GAGAAAAATA AATAAATTAC ATTTTATCTG CACACATGAA TTCTAGAGTG  
 AGTTAAATTT ACCACAGCGG GGCATATATA TGTATATATA TGATACCTTG TTTTATATA GCTCCNTATA GTTTTAAAG  
 CACTTGTAC

SEQ ID NO:604: (Length of Sequence = 399 Nucleotides)

TCTCTAAGCA AAAAGAAAT GATGAAAGAA GCAAACCTGG AGCATCAGAA AGGAAGAAAG AACATGATAA AATGAAATA  
 TGAGCTCCTA TTATGAACAT CGTATTACCA TTCATTGTA AACITAATCG TATATTTATA TATAAGCATC CTCAGAGAT  
 GCTGIGGGIT CAGTTTCAGN CCACTACAAT AAAGTGAATA TAGCAATAAA GCAACTCATA TGAATTTTTT GGTTCCTCAG  
 TGCATATAAA ATTAANCCTC ATGCTATACT GTAGTCATTT AAGCATGCAA TAGCATTATG TCTAAAAANT GTACATACCT  
 TTATTTAAA ACGCTTTTAT TGCTTAAAN AGGCTAAATG GCCATCTGA GCCATGGCT TTTTCCTGG CAGAGGGG

SEQ ID NO:605: (Length of Sequence = 372 Nucleotides)

ATGCCCTAGA AATCCTACCA CCTCCAGAA ATGATAGTTA TGGAAATTAA CATGGCATGT CAGATATGGT TOGCTGATGC  
 CTGCTTTAG TTCTCAGAAA TAAGGCTTTA AAAGACTGGC ATGTTTCAGG ATTGCTGTCA GGAAATGATA ATTTAAAATA  
 CCCAAGAGTA CACTAAGAAT TATGGAAGCA TCTGTGAAC TAATAAGCCA GTGGACATAC TGATTTTAC CAATGTGTCT  
 ACATACTATA TTAATAAACT TCCTACAAAG TATTGTCCA ATTCAGTTCA TCTGAGGATG TGAAACACT ACAGTGATCC  
 TTAAACATC ACATTCACAA CCTGACAGA CTGAAATAAA ATGAAATTAG GG

SEQ ID NO:606: (Length of Sequence = 399 Nucleotides)

208

TGCCTTCCTT TCTTCAATTC GAGACAGCAG TATCATTAGT GTTGTATAGG TTATAATTAA ATCTAAGTAG TTCTTTGTTA  
 AATCAAAGTT TACAGTAATA TCAAAGAAGA CTTGGCAAAC GTCAATAGTA TTCAGCAATT CACAAACATG GTCCTTAAAT  
 TOCATAACAT CTACAAATGT GAAGTAATAT AATGCCAGAT TTTCAGAAAT CTCGTATTTT CCTTTCTGTA GTTGTGCAAG  
 CTGTTGATTG TTGTTGGGGG TTTCTACAGC AGGGAAATTT CTGACTATGA ATTTACAGC AGATTCCAGG NTTTTGTGGA  
 TAAGATAGGA TGGNTTTGCC NTGGGNCCTC CACATGCCNT TCTTGATGTT GTAGAGGCGG GTGAGCATGC CGACGGCCC

SEQ ID NO:607: (Length of Sequence = 412 Nucleotides)

CTGTACCCCTT ATAAAGAGTG AAAGCCCTGC CCCCTTCTCC TATAGAACCC CTAGCAAGGA GACTGGAAGA NTCAAAAACA  
 ATCCACCCAA AAAATGGCCT GCAGGGACAC AGTCCCAGAG AAAGAGACTA TGTACAACAA GGTACAGTAA GTAAGACCTG  
 CCCACACACA GGACTTCCAA TCGACTTCTT AGTGCCTACT CCTACAGATG AACAGATCAA CCAGGGCCAC CAGATGCTCC  
 AGGAAAGACA GGAGTCCAAA AAGAAAATTC GGTAAGTTTG AATATATTTT GAGCAAATTT TCAGTTCTGT TGAAGTATTG  
 GGGGACATT CAACAGTGAG TAGTAGTTTA GGGGAACAG CTGGCACCTC TGGCAGTGC CTCAGAGGTC AANCCAGCGT  
 NTAGGTGCT TT

SEQ ID NO:608: (Length of Sequence = 419 Nucleotides)

ATGAAGGCAG CTGAACCTC CATCAAGTTT CTGCTCCCC AACGTAATAT GGAAGTCGTT CTGGCTGTAG GACCCAGCT  
 GATTGGAATT GGAAAGCACA GTGCAGCTGC AGAGCTCTAT CTGAATCTGG ACCTTGTCAG GGAAGCAATC GATGCTTTCA  
 TCGAGGGTGA GGAGTGAAC AAGGCGAAGG TTGTAGCTAA GGAGTATAGT CCCAGGTATG AAGACTATGT GGACCAGCAT  
 TATAAAGAGT TCCTCAAGAA TCAGGGCAA GTGGACTCGC TGGTGGGTGT GGATGTGATA GCTGCTTTGG ACCTGTATGT  
 GGAGCAGGGC CAGTGGGGAC AAGTGCATTG AAACAGCTAC CAAGCAGAAC TACAAGATTC TGCACAAGTA TGTGGCTTTG  
 TATGCAACTC ACTTGATCC

SEQ ID NO:609: (Length of Sequence = 337 Nucleotides)

GGTGAAGTT GTAGTGAGCC GAGATCATGC CACTGCCTC CAGGTGGGT GACAGAGAGA GGCTCCATCT CATAAAAAAA  
 GAAAGAAAA AGCATTTCTG AAAGGAATAA AAAACAAAT GATAACATCC CCTAATCTCT AGTTGTTGGG ATGTAGTATC  
 CTTCAATTGA TCAGGAAATC ATATGATTGT CCTTAAATTA TTAAGTTGGC AGAATTTGTG TGGTTTCATA ATGATGCTTG  
 TAAGATGATA TTTAATGGA AATGTTTTAG ACTATATCTN TTGTGTTTTT TCTGCTGTTN TTTGTGTAAG GCTTAAANCT  
 ACCCCCTTTA AAAACAG

SEQ ID NO:610: (Length of Sequence = 441 Nucleotides)

TAAGCCAGAG ACATTTCACT GTATTAATCT TGATACTAAT TACTAAGGCT TTTCTGTGGA CATTAAATTT GATCTGTTTA  
 ATTGCAAATA CAATAAAGT CGTGATTTAT GCTTAATGTT TCTGCTAGGC TGATGACATT TTGAAAATGG CACTTATAGC  
 CTGGTTTGTG TTGGTTACAA CTTTGTGGC TCCAGATGCT AAAAAAATC TAATTGAGTA AGTAAATAAT GCAGCTAAGC  
 GTGCTCTCT CGCTTCGAA AAGTTTTTTC TACTCTTTT TCTCCCTGGA GAGGCCCTGC TGCACACTGA TGCTGATCTA  
 AGGAAATGCC TTTGCTTCTT TGCCACTGAG CAATGTTAGA ATCACTAGGA GGGCAGGGCT ATCCCACTGG TCACTCTGTC  
 CCAGCATATC TACCATGAAG TCAGCAGGGA CTACAACTC C

SEQ ID NO:611: (Length of Sequence = 344 Nucleotides)

TTTGGTACAG TAATTAGGTT TGGTTGATTC GGTATGGGG GTATACACGC ACATGCAAAC ACACACAGGG TGTGCGTGTG  
 TGTATAAG; GCAATATACA CATGCACACA TATACACATA TGTATATAG GATGTGTGTA TATGTGTGTA TATATATAGG  
 GTGTGTATGT ATCTATATA TGCCATATA CATGTATAT TNGTATATAT ACATGTATAT GTACACATGT GTGCATATGT

GTACATATAT GTGTATATAT GTATATATCC CACATCTCCA ATTINOCTAT ACGTATATAC ACACATATAT GTTATATAGG  
GTGTACAGAT ATAGGATATG TGTC

SEQ ID NO:612: (Length of Sequence = 384 Nucleotides)

TGATGACCAT AAGCCCATGC TTTTCATAGA TGTTTAAGGG TTAAATGAGG TAATGCATGT CGAGTGCTCA GCCAACTGAG  
ATTGAGGAAG CGCTCAATAG ATGCTGGCTG TCATTATTAA CTGAGTAAGT AATCCTTTTC CCACAGAAGC AGTAGAAGGC  
TGACGATGTG TGTGAAAAGG ATGGATACAA TTCCCTGGGC CACAAATAAA GGTTTTTTTG GTGTGTGTG TTGTTTAAAT  
GAACTGAAAT GAGTTTGAGA GATTATATA TTATTTTACA ATACTTCTTA ATGCTAGTTT AAAAAGTTCA ACATTGTCAT  
TCTACTCCAC TTCGATGA GATAAGTATA TGAGGNGCT TAATCCCOG NTAAACTAAG CAAG

SEQ ID NO:613: (Length of Sequence = 342 Nucleotides)

TATTTATTTT TGTGGGTGTC GACTTCCTAT GGGGGCTTTT TGGGTGACAC TCCCTTAAGG GTTCAGTTTG ACAATTCINA  
GAGTGTCTCT GCAGTGGAG GCCACCAGAG GTATCTAAGC TCCTGCTTC CTATTINATA ATCCTCCAGC CCCAGCAGGT  
CCACTCCTGG TTCTGTGTG TTTGGCCCGG GCACAATCCC CACTGCTTTG CTAGACGTGC TTCTGCCAT GTGGCTTTGG  
GCCTAGAGCT TGTGATAAT TGCAGCTGT GGCAGTGGAA ATATGGCTGA ATGAGCGTCT AAACCCCTGG GTGGGGGNC  
TNAANINCNN GGGTTTTTAA AA

SEQ ID NO:614: (Length of Sequence = 393 Nucleotides)

CAGTGTATT AACAAATAGC AGGAGTGGGA AGCCACCTAA ATGTCCATCA ACAGATGGAT GGATAATGA AATGTGGTCT  
ATACATACAA TGGAAATATTA TTCAGCTTA AAAAAGGAGC AAATCCTGCC ATGTGCTACA ACGTGGATGA ACCTTGAGGA  
TGTTTTGCTA AGTGACATAA GCCAGTCACA AAAAGACAAA CGCTGCATGA TTCCATTAT ATGAGGAATC TAAAGTAGTC  
AAACTCTTAG AAAGTAGAAT AGTGGTTAGC AGGGGTAGG GGGAGGGGAA AAAGAAAAGT TACTGTTTTAA TGGCTATAGA  
GTTTCAGATA TGCAATACGN NAATTCCTGG GGGATCTTT TGCAACCACA ATGTGCACCG TATAATCCA CTT

SEQ ID NO:615: (Length of Sequence = 310 Nucleotides)

ATTATATACA TTCTTTACT GATTTTTTAA AATTGTGTCA ATATCTTCAG TGAATCTTA ACAATCTGGG GAACTGTTTT  
CCTCAATTAC CACTTCAGCA ACGTTCATAC GAAATCAAGG CTGCGCTTCA TGTGAGTGT AGGNTCAACT TTAACGAA  
GGTTGTGTT TGTCTCTAAC ATCTTCAGAG TGAGCTTTAG GGATGCCTGA AGGATGGACA GTACAAGCAA GCAGCTACTT  
CCATGATACA GTGGGAAGAT AAAAAGGCC ATTCACTCCA GCGTGACCT GTAAATCCAG CTGCGCTCC

SEQ ID NO:616: (Length of Sequence = 266 Nucleotides)

GAGATGGAGT CTGCTCTAT CACCAGGCT GGAGTTCAGT GGCACGATCT CGACTCACTG CAAGCNCOCG CCCCCAGGT  
CAGGCCATIN TCCTGCCTCA NCCTCTCGAG CAGCTGGGAC TACTGGTGCC CACCACCACT CCAGCTAAT TTTTINTATT  
TTTGGTAGAG ACGGGGTTT ACGGTGTAG CCAGGATGGT CTGATCTCC TGACCTGTTG ATCCACCCGC NTGGGCTCC  
CAAAGTGCTG GGATTACGAG CGTAAG

SEQ ID NO:617: (Length of Sequence = 376 Nucleotides)

ATAATAATGA AAAGTGAAGG GTGGGGGTGC TGGCCACCTC CCATTTCTTT GCGTGGGTGG TGGTGACCAC GGCGCCCTTG  
TGCTCTTCC ATTGGTTACT GAGGACCAAT GCCCTCATGG GCCCAGGCCA CAGGCACCA CCGTINAGCC TCACCTGCCA  
CCTCTCTCCA TGTGGCTTN TTGCCCTGG GGCTGGCCTG GGCATGGGG AGCTEATNTC CCGACCAAGG GGCTTGCCA  
TGINTCCTTC ACAANCCCCA CTCCCGGG ACTGAGCCTC CACTCTCTGC TGGGCTGAGG GCTCTGTGGT NGCCAGGAG  
CCCTCCAGC CAGTGCCAG CCAATCCCAT CATCAGCACT TGGTTTTAAG CTTCAA

SEQ ID NO:618: (Length of Sequence = 352 Nucleotides)

GCCCCATCCTG GCTAACACGG TGAACCCCGT CTCTACTAAA AATACAAAAA ATTAGCCAGG CGTGGTGGCG GGTGCCTGTA  
GTCCAGCTA CTTGGGAGGC TGAGGCAGGA GAATGGCATG AACCCGGGAG GTGGAGCTTG CAATGAGCCA AGACTGCGCC  
ACTGCACTCC AGCATGGGCG ACGGAGCAAG ACTCTGTCTC AAAAAAATAA TAATAATAAT AAAATAAAAA GTTTGTTAGT  
ATTAGCAGAT ACATAATTACT AGGTACCCCC CATGCTCAAT GAAGTGTGG GNTACTCTNA AAAAGTGTCC AATCTTACAG  
GTGTGACTTC CTCTGGAAC TCAAATTCTT TT

SEQ ID NO:619: (Length of Sequence = 359 Nucleotides)

AAAAAAAACG ACCCCACAA GGGGAAGGC CCCAAGTGG CCCCTGCCTG TNGTNCCTC TGGCTCCAGA GATGTCTGCA  
TAGGCCTCAG CTTCTCACTG GCCAATCTCC TCTTCATGG CACCAGCCAC TGCTAAACAT CCTTCCCTCA CTTCTTGTGT  
AAGCTTGCTC CCCTGAGCCA CAGGTTGCAC ATCTAAACCT CAGTCCAGG GAAAGGAAGA ACCAATGGAA GTGCCAGAGT  
CCTGGGGCAA GCCAGAGCAT CACCTGTGAG CAAACCTCTG CTGGGCACTC TAAGCAAGCA CAGGACAAGN CCCAGAGTTT  
AGTGTGTCCA GTATCCAGCA TGGNGACAGC ACATGCATT

SEQ ID NO:620: (Length of Sequence = 447 Nucleotides)

CTCTCTCAGC ACAGCCTGGG GAGGGGGTCA TTGTTCTCCT CGTCCATCAG GGATCTCAGA GGCTCAGAGA CTGCAAGCTG  
CTTGCCCAAG TCACACAGCT AGTGAAGACC AGAGCAGTTT CATCTGGTTG TGACTCTAAG CTCAGTGTCT TCTCCACTAC  
CCCACACCAG CCTTGGTGCC ACCAAAAGTG CTCCCCAAAA GGAAGGAGAA TGGCAGCCTC CACATCTGG GTTCAAGTGA  
TTATCCTGCC TCAGCCTCCA AGTAGCTGGG ATTGCAGGTG TGCAACCACCA TGCCCTGGGAT AATTTTTTGT ATTTTTTAAG  
TAGGACACGG TTTCACCATG TTGGGCCAGG CTGGTCTTGG AACTTCTTGA GGTGTAAATG ATCTTNCCTC ACCTTNTGCC  
TTCCCAAGTG CTTGGGATTT ACAAGGTTT AAGCCACCCG AATCCAT

SEQ ID NO:621: (Length of Sequence = 237 Nucleotides)

CAATACCCCT GNTCCTGGG GCAGGTGTC TGGGATCTG GACAGGAGGG TCAGGTGAT TTTAACCAG AGAGACCTGA  
TCTCATCACT GTCCCTTAGA GGGGAGAGAA GTTCGTNCCG GCCAAAGGG ACCAGTGTGT AGAAGTGTCT CTCCAGCTCC  
TTGGCGATGT CACTGTGGT CCTGGCGTIN ATGGAGCCTA CAGGGGCCCT AGGACCACTG CCCCNTTGG CAGCGGC

SEQ ID NO:622: (Length of Sequence = 247 Nucleotides)

AGAAGGTCAA TAATAACAAA CTCTTCAAG GTAAAGCAGG ATGTTGGAAA CCATTGCAAG GAAGCTAAAA ACCTTGAAAA  
AAGATTAGAA GAATGGCTAA CTAGAATAAA CAGTGTAGAG AAGACCTTAA ATGACCTGAT GGAGCTGAAA ACCATGGCAC  
GAGAACTACG TGATGCATGC ACAAGCTTCA ATAGACAATT CGATCAAGTG GAAGAAAGG TATCAGTGAT TGAAGATCAA  
ATAAATG

SEQ ID NO:623: (Length of Sequence = 315 Nucleotides)

AATTTAGGTT TGTTTTATTT AAGTTTAATG TTAATCCAT GCTGTGTTT AGTAAGANCA ATACAGATTC TGTATCTGTG  
GCTCCAGTCA GATATCCAGT AGTACAAATN AGCTTCAAGT TACACATACT GANCAAAAGA GGTGAGCGA GCGAAGGAGG  
GGAGGAGTGA GGGGAAGGAG GTAGGGGAG GGGGAAGGAG AAGAAACAAA AGANTTGAAC AGGCATGCAG GCTTTTCCAT  
ACCACCTTCA ACGCTAACCT GCTTCAGTGG GAGAGTAAAG TAGGCAAGAN TGAGCAGCCA CGGATTGTG AACTG

SEQ ID NO:624: (Length of Sequence = 375 Nucleotides)

CCATGTTGGC CAGGTCTCGA ACTCCTGGCA TCAGGTGATC CGCCGTTT AGCTTCCAA AGTGTGGGA TTACAGGCTT  
GAGCCACCAG GCCTGGCCCG TTAATATGTT TATTTTAAAT TGCATTAGTA AAAAAAATAA AAATTTTAAT TGCTAGAAC



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TTAAATATCA ATACCCACAT TAATAAAGC TATTGGGAG CCTTAATAAT TATCAATGGT GTAAAGGGT CCTGAGACCA  
 AAAAGTTGA CTTCACCAGG TGTTGAACA CTACAGATCC CATCTGCCC ATGAAGCTTC CCTAGACATC CCCACCCAC  
 CGTGCTCCT TCTGCATCCT ACAATAGCAT CCACTGGTAA GGGCCACTTA TTTTA

SEQ ID NO:625: (Length of Sequence = 305 Nucleotides)

GTTCCTAGAT TACTCAAATT TAGTACTCTT CCATCTTTTC TTGTGCTAT TCTTTTAAAA TCACAAGAAG TCATAACTT  
 AAGTAGGAAT TTGTATAATG TAACTTATG TGAGTATAT TCCTTACCAG CTCATAAAGA ACTATGTAAA CTTGAATGCA  
 TATTTTINAC ATAAAAATAG CAAAAA AAAANCAAAA AAAAACAGT ACTGGCCTAA TACTAGTNGA NTTACAGAAT  
 ANGGGTAAAT ANTACATGNN CATCCTTACA GAGTGAGCAT AAACAATACA TGGTAATAAT ATTTA

SEQ ID NO:626: (Length of Sequence = 300 Nucleotides)

AGCAATCACA TAAGGAAGGC ACCTCGAGTC TAGTAACACT GTGACTCTTG CGTCTCTTA GAGGTACTTG GTGGTCTTG  
 ATAGATCTG GAAGAATTCT TTGGATTTC AGACATAGGC TCTGTNCTC TTCCCTTACT TTCTCCAAA CAAATGGCAT  
 CTCCTCTCT CTCTCTCTGT GCTGAGCTGC CTAGAAGTGT GGGTGGGATC ACACAAGCAC CCTTNGGCC ATTGCCCTG  
 GGACTGTGCT AGGTGAGACC TGAAGTCAGC ACAGCATGG GTCTACCCA ACACCTGTG

SEQ ID NO:627: (Length of Sequence = 369 Nucleotides)

GAAGAAGAGA GAGGAGAGGG AGTCAGAGT GCTTTGGAAC TGGAGGTTG CTTTCCACTG ACAACATCCA TATCTNCTGC  
 TAATGCCAAC ATGCTCCAA GTGTCTTAGT GGGTCCACA AAGTTGATCC AGCCAGAGG AGTTCAGGG ACAGTCAAGA  
 AACCAGAGGT GCTGCCACA TCCCATCAC TCCCTTCCC AACTTCCCAG CCTTGCCCCA AAAGCAGCAG CTCAGACAA  
 CCTGAGATAC TACTGTNATG GGTCCCGGG AGGAGGACAG CAGGAGTCTG AACTCCAGAG GAGGGGGAAT ATGGGTAAAA  
 CAGAGAGATG GCAAGGAGAC AAGCTGTNCC CAGACAGAGG GATGGGAGG

SEQ ID NO:628: (Length of Sequence = 310 Nucleotides)

TTTTTTTTT TGAGACAAGA GTCTCACTCT ATCACCAGG CTGGAGTGA GTGACATAAT CATGGCTCAA TGCAGCCTCG  
 ACCTCTCAGA CTCAAGTAT CCTCCACCT CAACATCCA AGTAGCTGG ACTACAGGAG AGCCACCATG CCCAGCTAGT  
 TTTINACTTT TCTGCAGAGA TGGTGTCTT CCATGTGCC CAGGTGGTTC TCGGAAGTCC GGGGCTCCAG CGATCCTCT  
 GCCTCAGTCT CCCAGAGTGC TGGACCCACA GGCATGAGCC ACCACTTCA GCCCCAAAT CCATGATTTT

SEQ ID NO:629: (Length of Sequence = 443 Nucleotides)

CGCAGAGCAG AGGGTGGAAA GGCAAGAGT ACAAGTGAGC GAGCCCTTTT TGATGAGCG TTGATCTGTT TACAAGGGGA  
 CTGCCTAAC ACTTCCATT AGCCCCACT TCCCAACT GTTGAGTGT TGCAGTTAAG TTCCAACAC ATGAATGCTG  
 GGGACACAT TTAAATTAGA GCAGTGATGA TCAGAAAGTT ATTGTGGGA AAGGAGGTC TATTTTAACT TAAGTAGCTT  
 GAAAAGCTC TTCAAGGAGT TGATACAAGA ACTGAGATTT GAATTAGAGG ACGAGTAAA GTGAAGAATC TGCGGCAAA  
 GTCCAGGCA GAGGAAGAG CAGGAAATGA TTCATCAGTA GACTTGCTCT CCCATTCTCG GCAAGGGCTA TTTACATTT  
 TCTTCCACTC TCTTCTCAG CACATCTOCA CCTGGGTTTT CTC

SEQ ID NO:630: (Length of Sequence = 263 Nucleotides)

TGGATGTGGT GAAAGCGAA CACTTATAGA CTGCTACTGG GAACGTAAGT NAGTACAACC TCTATGGAAA ACTGTATGGA  
 GATTTTTTAA AGAACTAAA GTATATCTAC CATTGATCC AGCAATCCA CTGCTGGTA TCTACTCAA GGAAATAAG

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TCATTACATC AAAAACACAC CTGCACACAT ATNTTTATTG CAACACAATT CACAATTGTA AAGATATGGA ACCAACCTAA  
GTGCCCATCA ACCCAATGTA GGG

SEQ ID NO:631: (Length of Sequence = 221 Nucleotides)

AATTTINACA TATCAGTAAAT TGTITTTATA ATTTGTGGTT TINATGAAAC ATTGCTATGC ATTTATTAGG AAAAAGCTGAA  
TTTCCCAACA GTTGAAGTGA AAAGNTATTT TAACTATTAT ACATAATCAA GATCCTGCCT CTACGGAATT AGCTAAACCT  
AAAAATGTTT GCATTAAATG ATAAATTCCT CCNGCATTCC TTGGGCGNGN TCTGGAGGTG G

SEQ ID NO:632: (Length of Sequence = 344 Nucleotides)

TGTGATGGAG ACAAATACTT CAGTATTGGG ACCCATGGGA GGTGGTCTCA CCTTACCAC AGGACTAAAT CCAAGCTTGC  
CAACTTCTCA ATCTTTGTNC CCTTCGTCTA GCAAAGGATT GCTACCCATG TATCATCACC AGCACTTACA TTCTTCCCT  
GCAGCTACTC AAAGTAGTTT CCCACCAAC ATCAGCAATC CTCCTTCAGG CCTGCTTATT GGGGTTTACG CTCCTCCGGN  
TCCCCAATT TTGGTTTCAG AATCCAGCCA GAGGACAGAC CTCAGTACCA CAGTAGCCAC TCCATCCTCT GGAATCAAGA  
AAAGACCAT ATCTCGTCTA CAGA

SEQ ID NO:633: (Length of Sequence = 378 Nucleotides)

GGTCAGACCT GAAGCCGGCA CAGCGCTGTG ACTGCCAAG ACCCCACTG TAACAACAAC CCAGCTGCCA CCTATTTAC  
TCAAGGCCCC AGGGCTCTCC AATTAGCAGG TAGTGAAGCC AGCCAGGCTT CTNTCCTTCC CTTCAGTGCA GTAAGCTCCC  
CTGGTCCCTA GATGCATTCA AAGGTGCTGT CTGAGAGCCA GGGCTCTCAG TCATAAACCT TATAAATCTA CCTGGNGTTC  
TGTTCTACCA TGCTGAGCT GGCAGTGAAT CCACCCGCC AATCCCTTCC CACTNTCCC TCCCTCTTN CCCAGGCAGG  
GTAGTCTGTT NCCACCTACG ACGTCATCAC AGTCTCATGC GGGATTACTG CCAGCTTC

SEQ ID NO:634: (Length of Sequence = 28 Nucleotides)

ATCAGTGGTC TACCACAGT TAAGTAAAGG GTCATATTG GAGTATCACA CATCTCAGTC TTGTAGAAAT TAGGACAGC  
AATTAGGAGT CATGCACATA TANGAGATGT AATCCACCC TTGACTATA GCCTACTCTT GINTTTTACA GAAAGACTG  
TGGNGAAGA AAACCTTTA CCTNTTNTT CAGGGAGAAA CTNACANCAC TCANCTGCCT GGCAGTGAAA ATNTGGCATC  
CAGTCCACTT TACCATCAGT GTTAAAGGAA ACCATCTCTG GTAAGC

SEQ ID NO:635: (Length of Sequence = 226 Nucleotides)

TTGGGATGAT GCTTTTATTA AACGGAAGCG TCCAAAAGG TCTGAGTCAA TGGTGGAGAG GGCAGTCAGC CCTGTGGCAT  
TTCAGGGCTC CCCACCGATA GTNATCGGCA GTGCTNACTG CAATGTGATA GAGATAGATG ATACCCTCGA CGACTCCGAT  
GAAGGATGTG ATCCTGGTGG AGTCTCAGGA CCTCCACTT CCATCTGGG NGTGCCCTC CCTCA

SEQ ID NO:636: (Length of Sequence = 367 Nucleotides)

AAAGCAATAA AAAGACAAAT TCCAAAATGG GCAAAGATC TGAATAAACA TTTCTCCAAA GATATGCAA CAGCCAATAA  
ATACATGAAA AGATGGCCAA CATCATTCAT TATGATTGC AGAAATGTAA GTCAAAACCA CAATGACATA CCAGTTGCT  
CCCACTAGGN TAGCTACAAT CAACAAAATG GACAGCAAAA AGTGTGTGGT AGGAGTAGAG AAATCTGAAC CCTCATGTAT  
TGCTAATGGA AACACAAAAT GATGGAGCTA CCATGAAAA CTGCTTATCA GTTTGACCTC GGAAGTTAA ACACAGAAGT  
ACCACATGAT CCAGCAATTC CACTCCTAGG TATATACCCC AAGGACT

SEQ ID NO:637: (Length of Sequence = 384 Nucleotides)

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TTCATAAAAA TTTTACTTAA AATCTGTAAC GCTAGATATT GACTATCCTT AGTTGAGTCA CTGAGGTTTA AACACAATGG  
 TAAGTCTTAA AGTCTGCTAT TTACAGAGCA TTGAATCTGT ACCAATTTGC AATAGAAAGC CTTCAGTATG CAAGAAGTTT  
 GCATGGGTAT TAAGAACACA GCCTAAATAA GGCATTTGAT CTAATCTGCA GGAAGAAITTT TCTTCCCCAA AACAGAATTA  
 TAAAAGCTTA CTTTAAACAG GAGGCAGAAT AATTCCTTTA GGAAACCATT TCATTCTGTT TCTACTAACC TATACCATCT  
 GAGGAATTCT AGGGAGGATA ATAAAANTCT CGTGTATTCC ACAGCAAAC TACATACCC TAAAG

SEQ ID NO:638: (Length of Sequence = 409 Nucleotides)

GAAATTTTTC ATCAGCTCTT GTTCTCTCTC ATTCTTTTIG ACCTGTGAGA TTTATCCTTT TTTCTTAATT TATTCTCACT  
 TAATGGGATT TCAGGAGCAT ATTGACTAAG TTTTCATTTT TACATGTATA CTGGGGAGTA TGACATAGAC ATCTCTGTAC  
 TTAGATATTA CTGATGTAAG TCTACTTTGA ATCAAATGAA CAGATGTTTA AAAAGTATTG TNOCCAATTG TTTTAATGAT  
 TTCINCCGTG GAGTTGGGGT GGTGCTGCC ATCACCACCT CAGGACGGGT ATTTGAAAAT ACCTGGGNN AATTGTTAACA  
 ATGTCTGGGA AAACACTGCA GGATATTTTA ATTGGGCAGA GGGGTCAAGG GGATGGATTA ACCATTGCGG AATGTGAGG  
 GACGGTCC

SEQ ID NO:639: (Length of Sequence = 197 Nucleotides)

GGTTCIAC TCAGGCTCAAG AGCATGGCTC AGGAGGAGAT CCGCAGAGAG ATGGACAAGA TNATOGAGGA CCTGGAGCTC  
 TCCAACAAAC GGCACCTACT GGTGCAGACA TTGTGGGGTG GCATGAAGCG CAAGTGTACC GTGGCCATCG CCTTCTGGG  
 CGGCTCTGCG GCCATCATCC TGGACGAGCC CACGGCG

SEQ ID NO:640: (Length of Sequence = 398 Nucleotides)

GAGAAGGAGT TTGCTCTTG TCACCCAGGC TGGAGTGCAA TGGTGGGGC TGGCTCACT GCAACCTCTG CCTCCCCGG  
 GTTCAAGGGA TTCTCTGCC TCAGCCTCTT GAGGAGCTGG GATTACAGGC ACCCGCCACA CACCAGCTA ATTTCTATT  
 TCCAGTAGAG ATGGGGTTTC ACCATGTTGG CCAGGCTGGT TTGAACTCC TGACCTCAGT TGATCTGCCT GCCTGGCCT  
 CCCAAAGTGC TGGGATTACA GCGGTGAGCC ATGTGGCACAC AGCCTTATCT GCATTTTCAA ACGGGCCAGT ATGGATGGGT  
 TTTACTCTTA TACTINGAAAG GTCATCCTTT TNAAAAANG AACCTTTAAA ACCATTAACT ATATATAAAA ACTATATT

SEQ ID NO:641: (Length of Sequence = 402 Nucleotides)

ATAATTTTNA GCAAATGAT ACAAACINT NITTAACCAAG TAGAAGATTG GTAGTTACAG TGAATCGTC AGGGAGTACA  
 GGGCGGCCAC CACTGGAGGG AGCTGAGGCC CTGGAAAAGG AGTCTGATTC INTGCAATTC TCTCTCTGCT TTINTTCCCA  
 GCOOOGTTAC AACCGAGTTC ACGTGGGGG COGCAGTGCA GCOCCAGCGG TGGCAGCTCT TGGAGTCTGT COGTTTAGTA  
 TGTTCCTCCC ACGAGCGTGG CTGGGTGAGT GGCCTGGAGA GCTCCCGGTG TTAACATTTT GATCTTAGAC CGGGGGGACG  
 TGTCACTAGG TAAAGGCCAT TGGGTAAACA GAGTAGATCA GGCCATGGCA TTTGTCTGGC CCTTTTACA GCAATTAAGG  
 GG

SEQ ID NO:642: (Length of Sequence = 395 Nucleotides)

CTTCAATGAT GCAATTOGAT TAGCTGTGTC TTACAACAG AACTCCAGG ACTTCATGGA TGAGATTTTT CAGGAGCTCG  
 AGAACTTCAG CTTGGAGCAG GAAGAGGAGG ACGTGCCAGA CCAGGAACAG AGCAGCAGCA TCGAGACCCC ATCAGAGGAG  
 GCGGCTCTC CCCACAGCTG AGGGGCTGGG GCTAGGGGTG GGTGGAGCCC TTTTAAATA CCTTCCCTT CAACAACCTCT  
 CCAGCTCTGA ATGGAGAAAC TCTCTAGENC ATCCCCCTT CTACCTCTG CAAOCCACCC ATCCTATTAG GCTNCCACAT  
 TCTAGGGCCC GTCTACAGG GGATGAGGT CAGCAACCAG CAAAACCTN GGACTTGTG GGAAGAATTT TCCCT

SEQ ID NO:643: (Length of Sequence = 325 Nucleotides)

GGTATCTTAA AGCCTTTTCAG GGATTTCAT AGACACATTT CTTTAGCTGA AATCTATTCT CTCAGAACT TACCCAACT  
 TCTTAATAAT GINCAAATC TAAGAAAGAT ATCATGGCTA CACAGCACCA GGNAGAGCAC ATTATTTCTC TTCACAATC  
 CCTTGCATAG CATCATGGCT TCCTAAGGGC TTTTAAGTTT ATTGCTTCAA CTGATTCTCA TAAAATCTCT GAGATGCTAT  
 CTGGAAAGTA TTATTATCCC CAGTTTGCAG ATAAGGCAAC TGAGGTCTAG ACTTGCTAAA AAATCACACA ACCAGGTAAG  
 TGGGC

SEQ ID NO:644: (Length of Sequence = 373 Nucleotides)

CTTCACATCA GCAGCCGGAC GAGGTGACTG AAAATCCAAA ACAGAAAATT GCAGCAGAAA GCAGTGAAAA TGTGTATTGT  
 CCAGAGAATC CTAATAATGAA GTTGGATGGA AAACCTGACC AAGAAGGCAA TGATGTAAAA ACAGCAGCTG AGGAGGTACT  
 AGCTGGTAGA GACACATTAG ATTTTGAGGA TGTACAGTT CAATCATCAG GCCCGAGGGC TGGTGGTGAA GAATTAGATG  
 AAGGTGTTGC AAAAGATAAT GCTAAAATAG ATGGTGCCAC TTTAAAGCAA TCCTNGAAGG ANCCAGAGGA GCGAAGGATG  
 CAGATCACTG CACCCGTACC CCAAAAATTG GAAAGTCCCC TCACAGGCCA TTT

SEQ ID NO:645: (Length of Sequence = 310 Nucleotides)

TTTTTTTTT AAGACTCAAG GTAATGAAA CIATGAGTAG AATAGTAAGG TGTGACAGGG GACAAATAAG TAGATATAAA  
 ACTATGCTGC AATATTTTAG TTATTAAAGC TGGGAAATAT GCAAATGTAA GTAGTGCTTG GAACCAGAGA AGGTCTATA  
 TTTAGCTGT CTTCTGTAGC TAAATCTGAC AAATTGAAAA ATATCATATT CTCTGCTCTA GGTACATTTT ATGTATATTT  
 TGACAGCATA TCAATATAT GANACATTAG GTTAAATAAA TTAATATCCA GTGGGATAAA CTATATGGGG

SEQ ID NO:646: (Length of Sequence = 362 Nucleotides)

CTTGGGATTG CTAGATCAGT GTTTTAGACA GGAATGCCAA GGCAGAAAAG AATCACATAT CCAGGACCAC ATAAAANCTG  
 GAGTGTATGT CATAACAAAT TTNCTCCTGT GCTTAGAAGT TTTATGGCTT TGGATTTTAC ATTGATGTTT GCAGTCCATT  
 TTGAGTACT TTTGTATCT GATATGAAAT ATACCCAAGT NCATTTAAAA AATAAGATTA TACAGTTGTT TATGGAATGC  
 ATTTATGTAC ACGGGTAATC TGTTTGTATT TTGTGTAT GTTAAACAT CTTTATTATA GTATTNTGTA AGAGTAGGTT  
 AATATTGACC TTGGGCATTT TTAACCAAG GGGGAATTT CC

SEQ ID NO:647: (Length of Sequence = 226 Nucleotides)

TTTTGGCGTC AGATCTGTAA GTTATTTGC TCAATGTACG ACAGCTACAT AATGNTTAC ATTCATGATA TTCCATCACT  
 GAGGAACTG CTAAGATGG TCCGTGTGTG AAATAATTCC TTAGAGAAAC ACGGAGCTGG AAAAATAATC ACTGATTAGA  
 CCTTAAAAAT AGTTCACTGC ATAACATGNC AAAAAGCACA AAGGCTCATT CAGAGACAT ATTTGT

SEQ ID NO:648: (Length of Sequence = 198 Nucleotides)

AACTAAAAAG TTAACATTT TACAAAACAA CAAGTTTCC TTAATTATG ATTTGTTATT ATAAAANCTA GTAAGAAAAA  
 ATTCCACCAC ATGAAAGCAT TTNCIAAAAT TCATACCCCC GTACCTATTT TTAANTACAG TTGGTAAATT GATTAGCTC  
 TATTINCATT TTGANTGATC ATCGGTTTTA TTTTATTT

SEQ ID NO:649: (Length of Sequence = 337 Nucleotides)

ACATCTGCAG CCATATATGA GTCCCTCAT GAGACTTAGC AACAGGTGT GTTTTAATGT GACAGTGTGT CTGATGTGTC  
 CCCAGCATAT TGGGACCAGT ACACAGTGT ATTGTACAT CTGCTGAGTA ACATTGAGTG TGTGGGTAAC TAAAGCCCTC  
 AGTAATTAAT TTAATTAAAT TTTCAAGCT TAATCTGAT CTGTACTTG CATGATTAT TTTCTCTGT GCTAAATCT  
 TCAATGTTCT TGCTTGATT GATCTGTCAT TATCTATCAC TTAATAAAA TANTAATNC CTTAATTAA GTCATGGTTA  
 AATGAGGCAC TTGTTT

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SEQ ID NO:650: (Length of Sequence = 286 Nucleotides)

GGGTTGAAAG GAAAGGTGAC AGGAAAGATG TGTTTAGCAT CCATGAGCAG CTGGGGAGAG TCTTTCCTGT CTGTAAACG  
 CATCTGAGAA GATTAGGAAA AAAAATAAAC AGAGCATCAG TTCTTTGAAT CTAAAAGACT TTTTCTACT AAAATTCTTA  
 CCTCAAATT CTCACTAAT GAAGANTGTT TACTTTTGT TTAACCTCAC TTCATTTTCC CAATTAATA TTATCAAAAA  
 AGTTAGTGCA TTGTAAAATA AGNTAATAAA GGNTAACACA TTATCC

SEQ ID NO:651: (Length of Sequence = 360 Nucleotides)

GATAATGTAA ATTTTGTCTT CTGGGCTTGT CATCAGGATT GCAATTTTNA GATTTAGTTT GCTAATGTGT TGGCCTTTGA  
 AAAATTATAT ACACCTGGTT TGTTTGGTT TTCTTAAGTC AAAACAAGGA AATAAAATCA CATTGTCTTT CCAAGAAAAG  
 ATAATGTTTA AGTGGTTGTT TAGTGTTTGG TGTCCTTGGG GGTTGGAGGG GGTGTGTGGA ATACACAAAC ACACACACAC  
 AACACACAC AGTCTATATA TAANCCTATT GGAGCCATCA CTATATTTTA AGGAAAATGN AAATAATCTA TTGAAGCTTT  
 AAAATTAGGA ATTTTGTATT TAAGCTAAGG AGCCTATTTT

SEQ ID NO:652: (Length of Sequence = 353 Nucleotides)

GTTGTGGGNN CCTGTAATCC CAGCTACTTG GGAGGCTGAG GCAGGAGAAT CGCTTGANCC CTGGAGGCAG AGGTTGCAGT  
 GAGCCGAGAT CGAACCACTG CACTCCAGCC TAGGTGACAA GAGCGAACT TTGCCGGCAT TTACACTCTC AAAAGATTTA  
 ACGCAATTAC AATCAAAAA CACTGTTCAT ATATAACT TTTTCACATG GAAATAAATT GGTGGTTTAA GGTTCACAAT  
 TCCTTTGAAT AAAATTTCAG TTATTAGTTA CAAATGCTA AGACAGATTG AGGTCTCAA GAAAGANCTT TGAGGAAAT  
 TTATGGTTT AAAGGGACTT TCACCAAATA TGA

SEQ ID NO:653: (Length of Sequence = 224 Nucleotides)

AAGACAGGGA NTACTTTATT CAAAACCCAT CACAGAAATG GACAGCTTGG GTCTGTACA AAGCATTCAT GTTTTAGNGC  
 ATAGGTCACT AATTGTATAT GAGAGCATAC ACTGCTACAT ACAAATTAAC TGNTCAGACC ACACTTTTC AATGTTTAA  
 ACAGATAAG CTCCCTGTA AAAGCAGCAC CTTTGTGAC GNTTAACTT TAGTATTCCT CTC

SEQ ID NO:654: (Length of Sequence = 353 Nucleotides)

GTCAACTCTA TTTTCCATAT GAATTATTAG ATTTGGTGCT GTCTTGIGAA GTAACTTGAT ACGATAGATG TGTAATATGA  
 ATTTTGTCCA CATGGTTGTG CCGTTGGCAG AACTGCAGT ACCTGAAATG GTTCCCTAAT TTTTTCCTAG TATTACTATC  
 CAACACTTCC TCTATAATC ACTAGTGTAT TGTATAATTG TTAAGTGTCC TTTATTCATA TATTAAATT AAAAGAATAC  
 TCTGGTAGGA TTTGAGGGC CAATAGTGT TTTCCACTGT TTGAGGTATT AGGAGGGCTA TTTACTGATA CCTGTAGTGC  
 CTCCCATTC TGGTTTATCA TGCACCTCTA AAT

SEQ ID NO:655: (Length of Sequence = 365 Nucleotides)

GAAACTINACT TCACATTTCT CCAGGGAGGG ATGCTTTGGA AAAACTGCTC AGTGAGATGA AGCACAGATC TGCTTTTINAT  
 CCTTTTGTGA CCTTTTAAAA GACATAAGGT ATGTTTGTAC ACTGGAGTAT ATATGAGGGT TGCTAACGTT TAGGTTGAAA  
 GAGCTGCCTG TGTCACAGC TTATTTATTT NCCACCAATT TTTGTCTCCT GGTCTCATCC AGTTACATTT CCTGGGATAT  
 GTTTTGGAG GTTGCTCAGA TCACGGCACT AGAGTCCCTT TGGGTTTCTC CTCCCTCTC TGCTATTTG GCTCGCCCT  
 TGACAAACAT TCCCACTT CACAACCAAG CCTTTGGCTA AATGT

SEQ ID NO:656: (Length of Sequence = 372 Nucleotides)

GTCAATGATC TGAGACCAGC CTGGCCATCA TGGCAAAACC CTATCTCTAC TAAAAATACA AAAGTTAGCT GGGTGTGGTG  
 GCGTGACCT GCATTCTCAG CGACTTGGGA TGCTGAGGCA GAAGAATGCG TTAAACCTGG GAGGCAGAGG TTGCAGTGAG

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COGAGATCGC TOCACTGCAC TCCAGTCTGG GTGACAGAGT GAGACCTTGT CTCCAAAATA AAAGAAATTT ACTGCAAAGG  
GATGTTGCAT TTCAGGTGAA TGTATGTAGC CTTTCAGAGG CCGGGCTATT TATTAGATGT ATTTTATAAC TGAGGGTTCT  
AGGTAAACAC AAGCCAAACA GATCCACCAG AAGCCTAGAG CTGTGGACTC TT

SEQ ID NO:657: (Length of Sequence = 334 Nucleotides)

GGTTGTGGAA AAAAAACCT CCAGATAAGA TTGTGCCTGC TTCATTTTCT TGTGAGGCTG CCCAGACAAA GGTACTTTTC  
CTGATGGGG ATTCTATGTC ACCTGATTCA GATACTGAGC TTGGAAGTCA GGCAGTGGTG GATCAGATTA CCAGACATCA  
CACCAACCA TTGAAGGAAG AAAGAGGGGC TATTGATCAG CATCAAGAAA CTAAACAAAC AACCAAGGAC CAATCTGGAG  
AGTCTGATAC ACAGAAATAG GTTCTGAAG AGCCCTGTGA ACTTCCTGT TGAATCATT CAGACCCAGA AAGCATGAGC  
TTATTCGAGG GATA

SEQ ID NO:658: (Length of Sequence = 286 Nucleotides)

ACAAACCAAC TGCAATTCCT TCTGGATATT GTTGAACAAA AATAGCATTG AGTTTACCCN CTAGTGCTAA CAGAAGNENC  
TCAAGCTGTT CCCCCATCAT GGGNGCAGCC CTTAACAGAG GGCTGCACAA ATCTGCAGTG CTGCTCTGGG GAAGGCTNCA  
AAGCACITTT TTCCCAAGAA GGGATGCTGT TCANGTCTGT TAGGGGAAGC ACACCGNCIN TGCCCTGGGCA CAGATGAACT  
GCCCTTCAAG GCAATCATCA TCTTTTTTCT AATAGGGAAG GTTTGG

SEQ ID NO:659: (Length of Sequence = 321 Nucleotides)

GGTCTTTATA TGTTTCCGAG ACAGGACTGA AACTCCCTGC CTCAAGTCA TTTTCCTAAG TAGCTGGGAC TATAGGCTGT  
TTCITTTTTT AAAGGAAGGA TTTTATGTTT ATCATGAAGG AAAATAA ATTTGGCTAA CTTAAGAGT TATTTATCAG  
GAGACACTAT TAAAAAAGG CAAATCAGAA ATTTGGAGAA ATTTTITA ATACTGATAA TAAGACAGAA TTGTACCCG  
TAACCATAA TATGTAGAAT TTCTACCATA TCAATAAGGT AATAGTTTCT GTTGCTCCAC ATCCTCTTGC ACGGTTGGGT  
A

SEQ ID NO:660: (Length of Sequence = 302 Nucleotides)

TTTGTAAGG ACATAATGTT TTGACTGGG GATCATGTTT GGCTGATGTA AATATTAATG CCAAAATAGG AGCTAGGATG  
AAAGTAACAC TGTAATTAGT AGTAGAATTT ATTTCAATAT AAAATGTGTC ATGACGTAAT TTTTATGGCT TGGCTCAAGC  
AACCAATTTT AGAGTGCACC CTCATTGATG CTACTCAGAG AGAGGTGGAT GTGCTGTTAC TGCTTTCTAA CTCTGCCTAC  
TAAGTGGCCT ATTATGATGA TGAAGTTGAT AAAGTAAACC AGTATCAACG NCTAAGTCTA GG

SEQ ID NO:661: (Length of Sequence = 249 Nucleotides)

AAAAAAAAA ACTCTCAAGG GTCTAACTTT ACCCATCATA AAATAATTTT GGTGCAAGGG TAGTGGCACA TTTTATTTAT  
TTGGGATACC ATGCAGATGC AACCTAGCCC CATTCTTTAT GCAAAGTAGA TTATCGGTGC ATTTCTTCTG CATTGNTAGT  
GAATCCTTAC TGGGNCAC TCATTCCATT TGGCAACAAT CTTTAATGNN CAGGCAATAT ATAACATTGC TGAAGTCTCT  
TAGCACTAA

SEQ ID NO:662: (Length of Sequence = 340 Nucleotides)

TTTTTTTTTG GCAGCCTTGT AAGGAGAACT TCACCATTTT CCAGCACATC CCTATGTGTG CGCCTATTTT AATGCACCTC  
TCTGAAACAG AGACCTTTTT GTTCACAACC ATAAGTAAAG CTGGAAAGTC AGTCTTCAGG CAAGGCGAGG GAGGAAAACA  
TCCATTAGA ATTTTTTCAG GAAAGACTTA TGGNAAAAA TTTCTCTC CCACCTCCTT TTATCCCCAT GAGACACAGT  
TTCCCACTGT AATCAGGGTA ATATGCATTT NTAAGINCIG ATATGTGATA CATTATGTG ATGGCAAAGA TAAGTCTGTC  
TTGCATGCAG GGTACTAGAG

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SEQ ID NO:663: (Length of Sequence = 325 Nucleotides)

CACAACAATT CTATGAAATT AGCTGGGGAG ATACTGTCCT TATTTTTCAC AGCTGAAGAA ACCAAAGCTT TGGGAAGTTT  
 GTGACTTCTC TGAGATCACA GCTGGTGATA GAAGGAGCTG GGACAGCGC TTGGGTTGAC TGGCTTCTGG TTTTGGTTCT  
 CTGGCTTCTA GTGCTGGAAG AAGCCCTCTC TTCCCTTCT CTTTCTCTAG TAGCATCTGA CTCTTTTTCAAT AAGCAAACAG  
 CTGTATAAAC AAAGCCCCCA TTTTGGTCAA GCACAGGGTG AATGTGATAT TGTTCOCAC AACCTTATTC TNCATCAAC  
 AGCCG

SEQ ID NO:664: (Length of Sequence = 300 Nucleotides)

TGCTGAGAG AGATGATGTT TCATGGGTGA TGTCTCTGGA AGAGATTGGA TAGGACCCAA GCACAGAGCA AGAAATTGGC  
 TTTAGGCAAG TCAGATTGT CTATACTAG TTAGGAGTAA AGAGAAATGG ATGATACAGA TGCAGCTATG TTGTAGGAG  
 GGAAGTGGAG GGAATTTCTG TGATGAGCT TTAGTAATGT AGGCAGCAAG GTCAACTACT GACAGTGAGA GGAGAAATTC  
 GGGGAGGCTG GTCACAGTTT GAAGTAATAG GTCATGGGGA GGCAGATGTT TGTGGGTGGA

SEQ ID NO:665: (Length of Sequence = 327 Nucleotides)

CAAATAAGAA CCCAGAGAGA GGGAGAGATT CACAGACAAT AGCTTAAAAA GTCTAGAAAT TATAGACCGA TTGAGGTCAG  
 CAAGAAACAA ATTATTCAAT ATATCCCTG AGGGCTAGAG CCAGACTTTC CCCTATGATT CCAAAATTAC TTGCAGTTT  
 CATTAGGGTG AAAGGCAGTG CAGTCTCATG AGTTCAGAAA GTAAAGGTTG TTCCTTAAAA TTTAGATAGA CTTGACAACC  
 ACTTAGGATG GCATTTTGGC ATTCTGTCCC TGCTCATCAA AGAAGTTGCT CAAATTTGTG GGNTAGAGGA ATGAGGAGCA  
 AGAAGTA

SEQ ID NO:666: (Length of Sequence = 319 Nucleotides)

ATTCCCAAGG AGAGGCTGAG ACAGAGAGGC TTGAGCTGT TCCTCAGCCC CCTACCCCTAA CTCCTCCCT ACTGTTGATC  
 AGGCTGGTCT CTAATCTCG AACTCAGTG ATATGTGTC CTCAGCTCC CAAAGTGCTG GGATTACAGG TGTGAGCCAC  
 CATGCTGGC CTGGGTTTTA TCTTAAGTC TTGTGTGTC TGTCCATCT GCATGAATAC ATTTCCTCA TTTACTTACG  
 TCTTAGCTTA AATGATACCT CCTCTCTTT CCTACTGCCA TTATCTTCCC TTGTACTCC ATACTCAGAT TTCATTGCA

SEQ ID NO:667: (Length of Sequence = 288 Nucleotides)

GGTGGCAGGC TGCTGCANT NCAAGCCAG GNGTTTCTG ATGGGTCAGG GTGGGGAGGC TGCACACCAC ACAAGGTCAC  
 CCTACTCTAC CTTCTACCA CCTACCACA GCGGTGAGCT CACCACTCCC CCAGGGCATG GGACTCTTGA TAATTCACAG  
 TOCATGAAC CCTACATTA TTGCAATGG TATGANTCCT TCTATGAAAG TACTTCCCCT GAGTGTGCCA GCCCTCAGTT  
 TGAAGGTCCC TTAAGTCTC CCCCAATTAA CTATAATGGG GATATTTT

SEQ ID NO:668: (Length of Sequence = 212 Nucleotides)

TCNITTCINT TTCTTATCTA TCINCTTCAC CATGTGCTT CGGGGCTGG AACATAGTAG ATGCTCAATA AATATTGATT  
 GAATGAATGA ATGAATAAT CINCTTACAC CTCTCATGCT TCAACAGGG AAAGGCTAGA TTATTAGAA GTCTGTGCGG  
 GGATAATAAT NAGCTCAGTG GAAGCCTCT AGTTCTCACT CGATTTCTC CC

SEQ ID NO:669: (Length of Sequence = 281 Nucleotides)

ATCTTTTCAA CCTATCAAT AAGATGTTAT GAAAGATTGG TTCTCTGTT TACAAGTAGT ATAGAATCTT TTTTGATCTT  
 TGACTCTGTG CTGCTATCT CATCAATGTT GTTGCTATTA ATATCTGTCC TTTAACACTG GATGTGGGA TCTTAGTAAT  
 GTTGCTGATA ATAGGATTTT CAGCAAACT TOCATATCCC TGAAGATAT GGTAGTTTAT ATTACTATAT CGATAACAGT  
 TTGCTGTG GAGATTTGAC TAGTTTTAGG TGTGGAAG C

SEQ ID NO:670: (Length of Sequence = 234 Nucleotides)

AATAAGTIG GGATATTGA TTGTTTCTT TTCTGATCTT TATGCTGACT GCAGTATCAG ATACCATTTC ATTGTTTAAA  
 AATCTTCCTT TTTTMTTIT TTTTMTTITG CATTFTGCTC TTTTGTCAAT GTTCAAAGT CAAGTTGATG GCNCAAAAT  
 TCCAGAGGCT AAGCAATGCA GAAGTTTCAT CTA CTGTCGAG CTAGTTTITAT TTCTTAAAA TACATTAAAT TAGG

SEQ ID NO:671: (Length of Sequence = 252 Nucleotides)

CCTGAAATGT AAATIGTTTT TAATATATTT AAGAGCACAC AGAAGTCTTG ATTTATAAAA AAATAAATAT ATAACATGAC  
 AAATTTACTG ATGATCCTGG GGCTCTGAGG TCAAACCTCTT TAAATGATCA GTGAAAACAT AAAACATCCA TGATCTGTTA  
 ACACACACAG GGGCATATTC CAGTTGTAAA AAACAANITC CTGAAGGCT CAGNACGTAC AAAANTCAGT NTTTNTGGCA  
 GAAAGCACAT CC

SEQ ID NO:672: (Length of Sequence = 366 Nucleotides)

CCATCCAAT ACTTACTCAA TCCTCTTGAA ATCTGCCTTT TGTAATGTAA CTGATAGGCC AGCGTTTTCT TTTACTGTGG  
 GAAATAAAGG CTACTTGGTT GCTTTEAGGA GGGCAACAAT GTCAGCTGCA TAAGCAGCAA GAATATTATA TTTNATTACT  
 AGTCCACCTT TAATAAGAG AGAAACCTTA GGAAATGGAA AGAGGTGCTT GTTTTATATT TCCITTGCTT TTCAACCAIT  
 GTTTAGACAC TCTCCCTTCT AGTGCTTGA GAACCTTCAT GGAACTCTG TTCAGGTCTT TGACTCTCAG CGACANATGT  
 GGAGGTCTT GTGGTCTTAG CTCTCTAGGC CTGAGAATCA CATACA

SEQ ID NO:673: (Length of Sequence = 349 Nucleotides)

CCTCCCATCT TGGCTCCCA AAGTGTAGG ATTACAGGCG TGAGCANCCA CACCCTGCCT GGTGTGTAC TCTTTTAAAT  
 ACTAAGTTT TAATGTAAA TGCTGCTTTT AGATACTCTG TAAAAATACA CCTATCAATG AGTTTTTTTA TTA AAAACAT  
 TGCAATGTIA CTAGNCTTTA AATACTAAGC AATAATTCAG GCTTCAATGT TGGTTTATAG TTTTCTCAIT TCTTTCAIT  
 AATACCTCTG TAAATGAAG CAGTTACTTC CATTFTCTG AGGTGAGATA AGTGCCCTGC ACAAATGTTA TAGGNCCAGT  
 AAGTGAGGAC TGGAGCTCTG GATCCTAAT

SEQ ID NO:674: (Length of Sequence = 256 Nucleotides)

GCACTTTGGG AGGCGAGGC AGTTGGNTCA CCTGAGGTIA GGAGTTTGAG ACCAGCCTGG CCAACAGGT GAAACNGTN  
 TTCGTCTAAA AATACAAAN TTAGCCGGGC GTGGTNGTGC ATGCCCTGTAG TCCAGGTAC TCAGNGGCT GAGGCAGGAG  
 AATCACTGA ACCCGAGGTG GGGCAGGNGG AGGTTCAGT AAGCCAAGAT CGCGCCATG CACTCTAGCC TAGGTGACAG  
 AGTGAGACTC CATCTC

SEQ ID NO:675: (Length of Sequence = 292 Nucleotides)

GAAGTCATT TAGACTCTCA ATTTTAAATT AATTTGAAT CACTAATATT TTCACAGTTT ATTAATATAT TTANTCCTA  
 TTAAATTIN AGATTATTT TATTACCATG TACTGAATTT TTACATCTG NTACCTTTC CTCTCCATG TCAGTATCAT  
 GTTCTCTAAT TATCTTGCCA AATTTTGAAG CTACACACAA AAAGCATACT TGCATTATTT ATAATANANT NGCATTCACT  
 GGCTTTTTAA AAAANTGTTT GATTCAAAAC TTAAACATAC TGATAAGTAA GA

SEQ ID NO:676: (Length of Sequence = 392 Nucleotides)

ATCAAAGATT GCAAACATTT ATTTTGATCC TGGACTACAG TGTGGGGATC ATTGCTATGT TGGCTTGCTT TINTATCCA  
 AATCTGAACC CAAAGTCAG CTGTGTGTAG CCATGCAGGA AGATATGTGG GATGCTGACT GGGATTTGCA TCAAAGCTG  
 TTCAAGGGAT GGACAGGAAT AAAGGAAAT NCAGGTCATA GATTGAGTGC TATATTTGAN GTAAATACAG ACCTTCAAAA



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CTGGTCCCTT CTGGTCTGAA ATTAGAGTAG ACTCGTCTCG AGTACTTGGC AAATGACTAT TTGATTCTCT GATTCCCTGG  
NCTCCATGCT CACCAGATGC ATAGCAGGGA TCTCTCCTAG NCACTCACAT CCAATTTTCA GG

SEQ ID NO:683: (Length of Sequence = 329 Nucleotides)

GATTTTAAAT AGTTAAAACA TTTTITIAAA TCCATAAGTA ATTCTTACTC TACTCATTTA TACACACATA TACTCACATG  
TACACAGACA TACCTACACA CACACTTATA AATACATGTA TACACAGAAT ATAGTAAGGT CTTTTATCCC TTTTCAATGA  
AATAAATATT GTATTCTATA TTTAGNATAA ATAATGTTGA AAAAGTGATT TTGGAGAAAG GTTGAAATGA TTGAGTCTTA  
AGTGTGTCAA TGTATAATCT ACCCCTTTCT AAACATCGTG TTTTAAGTAG TCATCTTACT TCAGAAATTA GAGGCTCAAT  
GTGTTTAGG

SEQ ID NO:684: (Length of Sequence = 281 Nucleotides)

AACATGGCTG ANTTGAGATT AACTGCCAT GATACATTGN CTGACAGCAC TTCACATTTT CCTGAGTTG GGGACAGAAA  
TCACACTGCC CAAATACATT ATCTGATGGC TCCCATGTT TCCCAAAAGT TAGGAAAGGA GGTTCTATAT ACATACATGC  
ACAAGTGCAT ACACACACAC ACACATACAC ACACACACAG TGCTAGATGA GATGTTGANT GNCATAAGGA AATGAAAGTN  
CCATCTCTCT NTINCCTACC CCTGCATCT GTCCCTINAT A

SEQ ID NO:685: (Length of Sequence = 324 Nucleotides)

ATTTTAAATA ATTTTAAACT AGCTACAAA TGTCATCAC TTCACAACT GACAGAGGAG ACAGGAGGAA TTTAATATTA  
CATGCIATAA TGATATTAT CTCACAGTTT ATATTTCATT CATTATATT ATTTTITTA AAGGTTTCTT TATCAGCTAC  
TAAACATCTC AGCAATTGG TGTGCATAGC TCTAGATTAA GCAACAAAGN ATTGTACTGA TAACAAACCA CAGGGGAAAT  
GGTGGTTAGT AAGAGTCAGC CTTATAAAAT TTACATCCAC ACTGTTTTCA CAGCAAGNTT GCTCTCTCCA AAACGGTGEN  
CATC

SEQ ID NO:686: (Length of Sequence = 380 Nucleotides)

CGAGGAGGAG GAGGAGAAAA TTCCCCAGA TTGGGGCAGG CCGCACCCC ACATTCCGTC CTGTTTIGAG AGGAGGAGGG  
AAGAGAAATA AAGTGGCAG CGCATAGAAG GCCAGCAGGG AGACTGCTTT CCAGACACCT CCGGCCACA CAGCCGTTCA  
CCCCCGTTT TTTCACTCCT GGAAAAGGAA TTGGGTCCTG TTTTCTTTT GGGCTCTGTG CAACINCAGC TACAGTGGA  
AAAAGCAAAC TGCTCTGAT CCCAGGCCCT GCTAAGCCT CAGCAGAACT TNAAGCCTA AACTINAAGA GCTCACCCG  
GACGAGCAGG CATNCCTTAA CCTTAAAGCA ATCCAGTTTC ACGGCCTGGT TCAGTGAAT

SEQ ID NO:687: (Length of Sequence = 305 Nucleotides)

GACACTTCCC CTCTTTTATG GAAGCATAGT AAGATTTTTC CTTTATGGG ATCATGATGG AGAAGTATAT GCTACAGGAG  
GNGAGGTTCA AATTGCAATG GAACCTCAGG CACTATATGA TGAAGTAAGA NCTNTGCCAA TTGCAAAGCT GGATAGGACA  
GTTGCTGAGA AAGCTGTTAA AAAATATGTA GAAGATGAAA TGSCAAGGCT CCTGATAGA TTGTCACTAA CTGGCCCTGA  
AGGAGATGAA TTATTGCCTA ATGAGATTAG GCTGCTGGA ACCCTATTG GTGCGTTAAG AATTG

SEQ ID NO:688: (Length of Sequence = 390 Nucleotides)

GAAGTCATAA GGCCTAAATA TTAATCCAGT CTGTGACAAC GACAAGGTGA ATACAAGCCA GTCTCTACTT CTCTGGGCTT  
CTGTTTCTG CACTTTATAT AAAGATTGGG CAAGATGGTC TAACTTAAAT TTTATGATTC ACTAAGTTGA TTTTGTATGG  
GGCAGATTTT NCTTCGATGA AATATTACA AATAAGNCAC TCAATAAAT CAGCAATGGG GTGCAGATGA GGACTACGT  
TTCTACAGCA AAATATGGGT GAACTCAGTA AGTGTAGNA CACAGAAGTT AATGCTGACC TCTTGATAG CATGTATGGG  
ATAATAAATC ATTTCTGCC TTCCATTCA GGGGTGAGG AGGAACAGT GTTCCGAC TCTTTAAGG

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SEQ ID NO:689: (Length of Sequence = 315 Nucleotides)

GATTTAAGTG TTAGCATTC TAAACTTGAG ACTCTAACAG TAAAAATAAA GTAATCTGAA ACCTGTTTCC ATGGGTAAAA  
 CACTCTGCCT GGTATCTTG TACACAAAAT TTAATAATA TGTGAATATC ATAAATGAA AATATCACTC CCTTCAATTT  
 CTTTGGCCTT CACAAATTCA ATGTGACTAT GATCCTTTTC AATAATACTT TCAATGACAT TGTGCTTCTT TAGAAAAATC  
 ACTTAAGTTG TAGCATACAA TAGTTAACAT TAGTCCTTTT ATTGCTATGG TATATGCTAA TTTTPTTAA AGGGG

SEQ ID NO:690: (Length of Sequence = 291 Nucleotides)

TTAAAATACT CCATATATTT NAGAAGCAAT TGAAAATGCA TCCATGTATG TNATTTGAGC GTTACTAGAA ATTTATTTAT  
 ACAAATCCAT ATTAATGTGC TAATAAGTGA CAAATATATA TATAGTCAAG CACTGAATAA TGAATTTTTG GTCAACGATG  
 AACTGCACAT ACAATGGTGG CCCCATAGA TTAATAAGA NCCAAAATTT CCTATGGCCT AGTGATGCTG TAGCCATCAT  
 AATGTGGTAG TGCAACCCAT TACCTTTTCT ATGTTTAAAT ATACAAATAC T

SEQ ID NO:691: (Length of Sequence = 451 Nucleotides)

TTGAGCATCC GGAATATGGA GAAGTAATTC AGCTACAGG TGACCAACGC AAGAACATAT GCCAGTNCCT CGTAGAGATT  
 GGACTGGCTA AGGACGATCA GCTGAAGGTT CATGGGTTTT AAGTGCTTGT GGCTCACTGA AGCTTAAGTG AGGATTTTCT  
 TGCAATGAGT AGAATTTCCC TTCTCTCCCT TGTCACAGGT TTA AAAACCT CACAGCTTGT ATAATGTAAC CATTTGGGGT  
 CCGCTTTTAA CTTGGACTAG TGTAACCTCT TCATGCAATA AACTGAAAAG AGCCATGCTG TCTAGTCTTG AAGTCCCTCA  
 TTTAAACAGA GGTCAAGCAA TAGGCGCTG GCAGTGTCAG GCTGAAACC AAGCAATACC GTCATGTTTC AGCCAAGCCC  
 AGAGNCCTAA GGTTTACAAA CAACTATGG NCCGGAACCT CCTCAAGTTC T

SEQ ID NO:692: (Length of Sequence = 363 Nucleotides)

GATTTTINGA TTATGTATAT TAGAAATGTT TAAAATTAAG ATATTAACAT TTCATGAAGC TGAGTGGTGA GCACACCAGT  
 TTTATATCT CTCTATATA CTTTGIGTAT ATTGAAATG TTTTCTATA AAAAGTATTT AAGCAAGTTT AGGAAAGAAT  
 ATTGATAAAT GAAATCTAGA GACCATCAA AGCCAATTT ACCATCAGAA AGTATAATTG TGTTCAAAT ATAATTGAAA  
 TTGIGTACT GTTGCAATT CTCTTTTTTG TGTGTGTA TGAAGCATC TTAACAGTT GCCTTTCAA GCTGTTATCT  
 TTGATANTAA CATAATTAA CCTAACATTG TGGACTTCTG TTA

SEQ ID NO:693: (Length of Sequence = 269 Nucleotides)

TTAAGGGTCC CAAGACTGCT CTAACAACAA CACCCATTT CATAAATATG GNTCAATAAA CACTTATTCA TTCTTTATAA  
 TTAGACTCTA TTGTTAGAT TGTTTTAGGT TTATAGAAA ATTGAGCAGA TAGTACAGAA GATTGCCATA TACCCCTCAC  
 CCACAGAATT TCACAATTAA CCCTGOGATT AAAGTCTAAT GTTAATATGA TATATTTAGT ACAAGTAGTG GGATTATATT  
 GATACATTAT TATTAATTAA AATCCNCA

SEQ ID NO:694: (Length of Sequence = 330 Nucleotides)

GGCATAGTCA CTTCCAGACA TGGTTGCTC TCCATGTGGA GTAGGTCAA GTCTCGTCC TCCTGGCCA GGTGGAAGCT  
 CCAGAGGGAC ATGTTTCAGC TTAGTACAAG GTGGCTGACA CTACTCTCT GTAGGAAGAG GCTGGCTGGA GGTGAGGGCG  
 CCCCACTCAG CCTGTACCCA TCAAGAAGTA TTCAGAAAGG ATGTCTCTGG CATCCACAAG ACTACTGGGC GAACCACT  
 GCAAAAATGA AAAGTAGCT ACACAATTA AATTGGTCTT AAACAAGCAA ATAATCCAGC CATGGGTGAC TCTGGGAATC  
 TAGAGTGCAA

SEQ ID NO:695: (Length of Sequence = 344 Nucleotides)

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CACTGTGACG GATGAGTGA TATTTCTTTG TACCTGAGC TCTTTCATCC TACCTTGGTG GTCAAATGTG AGAGCAAGTG  
 CTTTGGGGCT CAGAGGGCAT CACTCCAAGC ATTCTGCATG GAGTCTGTTG TGGTGAATGT NCTTGCTGGC ATCTTGATCA  
 AGGACTTTGT CATCATTAGC CATCAAATGC TTGTTGGTCC TTCTCAACCC TGTAAATGTTG ATACTTAAAA AACTGGAAAC  
 ATCCTGACAG AAACAGTGA GAAAGTGGTT GTGTGAGCTC TGGTTATCGC ATTACAGTTA AAGTTGGCAG ATAGGTTCTG  
 TATTCAGTGC CCCATCAAAA ACAG

SEQ ID NO:696: (Length of Sequence = 324 Nucleotides)

CTTGAACGTG GCAGATAAGC ATTTTGATAT GCTGCTGGAT TCAGTTTGCC AGTATTTTAT TGAGCATTTT ACATCGATGT  
 TCATCAGGGA TATTGGCCTG AAATTTTGTG GTTGTGTGTG TATCTCTGCT AGGTTTTGGT ATCAGGATGA TGCTGGCCTC  
 ATATAATGAC TTAGGGAGGA GTCCCTCTTT TNCATTGTTT TGGAAATAGT TCAGAAGGAA TGTTACCAGC TCTTCTTTGT  
 ACCTCTGGTA GAATTTGGCT GTGAATCCAA TAGACACAAT AAAAAAATGA TAAATGGGAT ATCACCCTG ACCTCAGAGG  
 AAAT

SEQ ID NO:697: (Length of Sequence = 341 Nucleotides)

AAITAATCAA TCAGCCATTT TGGTGGCGA AATTTATAAG GCAAGTAATA CTTTGTAGTTT CTTTGATAGA CACCATGATC  
 AGAAACATAG TCTCTTTCTT AAAGGGAAAA TAGGAAGTCT TCTGAGTCAT AACAGATGCA TGCATAAATT TCTCTGAGTC  
 TTCATAAGAA ACACAAGCAA GATTTACAG AGGCAGTGA ATTTGAACTG AGTCTTGAGA AATAAGCAAT ATCTGAACAT  
 GTAGAATGCA AAATAAGGA TAAGCAAGTG CTAATGCCA GAGGGGTAAT ACATATTAA TANCCANTAA CCAATTGCTA  
 CTTGTGTTTC TTACTACTAGA A

SEQ ID NO:698: (Length of Sequence = 317 Nucleotides)

GCAAACCAGG AGAAGCAGAA GAGCAGGGTA AACCTGGGT ATAATTTGTC TAGACCCCCA TGTCTCCTTT AGTCTGAGTT  
 CTGACATAAT TAACTGTCTA TGAGATGTAC TGGGCTTTTC CTCATTGCTT TTTGATGCCA CCTCACTAAT GTAAACAAAA  
 CATTCATTTT TTATCCTAT TTTTCTTAC AGCTGCTTAG CACAGTCCTT ATGAAAAAT GAAGCCTTGA AAATGGTATA  
 TCTCTCGAC AAAGCTAAGC CTGACAAGTT GCTGCTATTA CTTAGGAATT AGAGAAGAGC AAGGGCAGAT GGTGGG

SEQ ID NO:699: (Length of Sequence = 385 Nucleotides)

ACCAGGAGAT GGAGTGCTC TAGACTGTGA TGCTGGGAAA GGATTGTGGG CTAGAAAAAG GGCTCCCTAG GGCCGGCATA  
 TGGGCCACTG GGTGGAAGAG GGGCTCTGAG ACCCTCACCC TGGAGCAGGT CATCACCCAC ACCGAAGAAT GAAGCGTGAA  
 TTCGGTCACG CTTAAATGT TGAATTGTTG GCAAAAGCCC AAGTTAATGA AATAGCATGG AAAATGGATG TGATGAGATT  
 TTTGAATTGT AATTAGATT AATTGTGAC TAGTTATCAG TCTGATATAT CTTATAAATC AAACGTTGGG TTGATTTATC  
 TTTTATCACT TCTAGGGNCT TACTCCTAAC AGTAACTCAC AAACCCAGCC CCAAATCAGA GGCTT

SEQ ID NO:700: (Length of Sequence = 315 Nucleotides)

ATCAGTTGGA TTTGCAGAGG ATTGGAAGGC AGCACCAGGC AGGCTCAGAC TCAGTCTGTA CAGGAATGGC TTTCTTTAGG  
 ATGAAAGAGT TGTTTTTTGA GGACAGCATT GATGATGCCA AGTACTGTGG GCGGCTCTAT GGCTTAGGCA CAGGAGTGGC  
 CCANAAGCAG AATGAGGATG TGGACTCTNC CCANGAGAAG ATGAGCATCC TGGCGNTTAT CANCAACATG CAGCAGTGAT  
 GGGCCAGGC TCTTCAGNT GGGCCTGATC CCNAGTGGT GCTTACTINTG CTGACTGTGT ACTTATCTTC CCCAA

SEQ ID NO:701: (Length of Sequence = 387 Nucleotides)

GGCAGGAGAA TCGCTTGGGC CCGGGAGGCA GAGGTTGCAG TGAGCCAAGA TCGTGCCACT GCACTCCATC CTGGGCAACA  
 GAGGAAAGT CTGTCTTAAA AATAAAAAAT AAAAAAATAA AGTAGGTCTT TTATCATTTG TGTTTCTTAA CATGTAGTAC

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TGTAACCTCC ACCTACTAGT AACTGAAAAC ACGCATGTGG GAACATTGCA CAGATGGATA GATGCAGAGA TGAAAGAAGG  
AAAGCTAAAA TATTINCCAC GTGAAAACCA TGCACTCTGT TCAGAACTA ATTCTGCCTT CACGCCCTCC AGGAGCATGG  
GAGGGGTGTC GTCCGTGNC TTTGTGGAT GAGGGGGACC ACATGGTATT TCTACTGAAA GAGTTTT

SEQ ID NO:702: (Length of Sequence = 397 Nucleotides)

CATCAAAAA AAAAGGAGCT AACTAGATGC TGTCAATAAG AGACTCACTT TAGATCTAGA GACACAGGTT CAATGTAAAG  
GGATGGAAAA ACATATTCCC TGTGGAAATC CCAATGAGGG TGCTATGGTT TTGCATGTGG TTTGTCCCA CCAAACTCA  
TGTTTAAATT TAATTGCCAA TGTAAATGGTT CTGGGAGCCT GGGCCTTAAAG AGATAATTAA GATGGATTAA TGCTTTTCCC  
ATGAGACTGG GTTAGTCGAG ACTCTTGCAA AAGCATGTTG TCGTTAAGTG GGTCACTCTC CTTGTCTCTG TCTCTTTTAT  
ATACACTTCT TCCCCCTCT ACTTTTCCAC CCTATTATGG AAGCACCGTG AAGCCCTCAC CAGATGCCAC CACCATG

SEQ ID NO:703: (Length of Sequence = 374 Nucleotides)

ATACAGGGTT AGACCAAGA GGAATTCAA TGAGGCCTGA TGGATTATG GACCAGAACA ACAGAGGGGT CTGAAGGAA  
GGAAGATATA GAAAGGCAA GTTGTGGTT AGAGAGGAAA TCCAGAGTT TAGCTCTGG GAGGTGTAAT AATTTCAAAA  
GAATAAGTCC AGGCCTGGCC ATGACATGGG AAGCTGAATC TCTGCAATGT TTTTCAAAAT AGCATAATGG ATATCTTTGA  
CTCCTACCCT GAAGCCAGAA AATATTAAAC TTGCATGTAT AATCATACAA ATGTATGCAT ACCTATTAT ACATACATT  
ACATATTTTA TACTTATGCT TTCATATATT CTACGTGAGG TACAATATAC TCCA

SEQ ID NO:704: (Length of Sequence = 422 Nucleotides)

GGCAATGACA TAGAGATGAT AAGAAACAAC ATGGTTTGGT AGAGGGAACA TTGTATTAG ACTCTGCCA TTTTAGCTG  
TATGACTTAC ATAAGTCATT TTGTGTCCAA GCCTCATTTT CTCCCATATG AAAAGTGAAG GGGTTGGATT AAATGACTAA  
AATCCCTTC CAGCCCTATG AGCCCAATGT ATTATGATCT CTGCTTTGTT TCCTTCTTAA GAGGCTTCT ACTATAAAAT  
GTGACCTATT TACATTTTAA GTGAAGTAG CCCACAATA TGAATAATCA NTTTAGATTT TCCTCATCTC CTTGGGAGA  
AATTAAATTC AAGCCTCTAT TCATTGTATG TTTTACAACA AGCTTCAAAG TTGGGCCATG GTTCATTAC AGTTTGTATA  
TTTTGAGGAC ACCAATAAAA AG

SEQ ID NO:705: (Length of Sequence = 229 Nucleotides)

GCTGGGNTC ATAACAGCTG GACTCAGCC GNTGACAGAG TCTTGATCAG TCCTCTGGGA ACTAGACGTC AGGCTCACAC  
CACTGCTGC GCTGATCTGG GNCCTTTTCT CCTCTGCTC ACCAAGGTCA AAGACAGGTT TGATTACTTC AGGCCTCTGT  
TTTTCCAAAG NTTTTTGCTT TNNCACTTC TGGTGCTGT TCCCAATTC AATAGATGCT ATAAAAATT

SEQ ID NO:706: (Length of Sequence = 255 Nucleotides)

GAGGACTGIN TACCTCAGTC CTCTCTTAA ACTCCTCAGC CTCCCAACAG GGGCCTCTC ACCTGGGTTT TGAGTGTGTA  
CCCCTTTATG AGAGTGAGAT GCCACCCGGG CAGCACTCGT TAAAGCTGGC CAGCAOGAGT GACTAAGGGG AGAGAGCATG  
ACATAGACCT GGGTGGCAAC GGGGACCTCT GGAAGCAGGT GGGAGTAACA NAGGAGAGGG CAGTNGAGGG TAGAGGAAAA  
GGACCTCCAG AGGTT

SEQ ID NO:707: (Length of Sequence = 324 Nucleotides)

COGNAGTGT GCCACTGCAC TCCACCTTGG TGACAGAGTG AGACTCCGTC TCCAAAAACA AAAAAACAA AGTTGAACTA  
TAACTGAAT TCCTCCCAAG GTTAGTTTCT CCTATGCCCT GGAATGAACA AGGACAGCTT GGAGGTTAGA AGCAAGATGG  
NGTCAGSCA GATCTCTTC ACTGTTAACA TTTTCTCAGT TATAATTTTT GCAAATGTGG TTTTCAGTCCC TGCAATCATA

ATACCTAGAA ATTTTGATAA ATACTTGTTA AACACCAAA AATAAACAT CCACAGCAAG GANTCGACTA TAAGGCGTTG  
GTGG

SEQ ID NO:708: (Length of Sequence = 325 Nucleotides)

GGGCTCATAC ACAGTTTTAT TTCCTGTTGA TTTTACAGAC ACTCCATCCT GCAAGCCCAT TCCCTTGGA AACCAGAAA  
GAGTGGGCAC AGTGCTCCCT AGAGGAATAG AGGGGACAAG ATGGCTGCCA GGGAGAGGGC AGTTGAGGCA CTTAGGGATT  
TACTCCGGCC CTGATGGAAG ATCTGGTGCC CAGGGTAGGG GGAGAGGGCC TGGGCTGGGC TGGAGCCTCC TAGGTATTTT  
CCAGAAGCCC CTTCAGGAAC TGTCACCTGG ACTCCAGCAC CACCCCTCGT CATGTTGTCA CTTCTGTGG TGGCGGGAGC  
GCAGG

SEQ ID NO:709: (Length of Sequence = 264 Nucleotides)

GGGCCCCGTT GCATGAGGCA CTTTGTCAAA ATGAGCAGAT ACGTATGAGC ACTGAACTCT TGAGTGAATC AACCAGAACT  
AAGACCCAGA TCCACGCACT CAGGAAGTTG CTCTGAATTT CAGTTTGACA ACAGAGAAGT AGAATATTTT TAATTAGCTA  
ATATATATAC ACATTTTTTA ATCATCCAAA ATTACAGGCA AATCACTTAA GGTCCCCAGC ACTTTACGNT GNAAGGTCAG  
AGAGANCCCC ACAAAAAGG TGTT

SEQ ID NO:710: (Length of Sequence = 366 Nucleotides)

ATTTTTATTA TATACATATC AGTACTCACA ATACGTTGCT TATTTAAGAT GGCTGTTTAT AAGTATAAAG CAGTTTGAGC  
AACACTGATT GTGCATTATT GTACTTCAGA TGAAAAATCC TTACATGGCG AATCAATGTC TTTTAAAATT TCAGATAAAG  
AATTINCATT TGAGGAGACA TACAATTGTA AGTGCTCAIT TTTTGICAAT TTAAAGACAC CATTATGTGT AAGANGGATT  
AATTTINCCA TAAAAATTACA AACACCCCTC ATGTCCTGAC ATTCACATGG AAAGGGCAGC ATAACCATTT AATCATCCAA  
ATGCATATCA GAGCAAATC CTAGGGCCTT TAGGTGTGAG GGTGGA

SEQ ID NO:711: (Length of Sequence = 216 Nucleotides)

GAAAAGCAGA AAAAAGTGGG GAAGATTTTC TATCTTGAAC TTGTGAGCTG GAGAATTACC ATTAGTAGCC CACTAATAGG  
TTATGGCOGA TGAGTCCCTT CATAACACAC TGAGAGCCAC TTTTGACACT CCCAGAAAAG GCAGGTTAAC AAAACCCCTT  
GATGGAAGCT TAGACCTCA TTGCCAGTG TACCAAGCC TCTTTGAACC TTGCTT

SEQ ID NO:712: (Length of Sequence = 276 Nucleotides)

ATTTTTTTCC CATAGCACGT ATCACTCTCT CATGTGTTAC CTGCTACACT AGAATTATGA CCCCTAAGAG GGAAGAGACT  
ATGTCAGTAT CATTGATTCT NATTAACACC ATTATTIAGA ACCATGCTTG GCTTAAAGTA GTAGCTGCTC AGTAAATATT  
TATCTATGTG TGAATTTTTA AGINCTTCCT TTATATTGAN TTAATAATTAG TCTCTGTGT GCAGCAGTCT GGGTTTGCT  
TATGTTGAAA TACTTATGTA GACTTCTACA TACATT

SEQ ID NO:713: (Length of Sequence = 354 Nucleotides)

AAACTTTACA ACCTGCACAT TTGTTATGCA TACTAAATGG TGTTTAAAA TTAGGGTTTC TTGCTCTC TACTACAC  
TAATCTGCTT AAAGGTGGTT GTTTCATATT TATAATGCTA ATTATCATAC CTACCTACTT TAAATTTTAG GTAGAAAATT  
ATCTGATTTA AATACAAACA TATTTTCTC ACATTGAGTA ATATGCATAA TGTAGTTCCA AATGTATTTT ATTACTATAG  
TCACAATATC CAACTAAAA TTACGCTATC TAGAATTGTA CCANCCAAAA TCTGTATTG GCAGATCTTG ACAGGCTGGA  
CTGCAATA TCTGGCTTGG AATTTTAAAC CCAT

SEQ ID NO:714: (Length of Sequence = 349 Nucleotides)

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CAGTAATTCT CTTACATCCT TCCCAAAAAT CAGTGTCTAG GGACTAGTTG ATCTGGATGA GTTATACATG ATATTGACT  
TINCATAAGT AGTGAAGGT TTCCTAAGT AAAGATCTGA GTTCTTGGT ATCTGACGTT TGTATACAGA TGGTGTCCAT  
TTGCTCAACC AGACAGGAGT TAACCTGTAT TAGAATTGTT TTINCTAAAG TNAATGTTACC TGAGAAATTA AGGACTGCAC  
CTGGTTTAAT GTTGTTCAC TTATCCCACC CTACAGAGAC CAGCAAGGTT CTGCCAGGCC TCGAGCATCC AAGCATGATT  
TTCTGTGAC AAAATCTAAA AATCCAACC

SEQ ID NO:715: (Length of Sequence = 302 Nucleotides)

ATATTTGAAA AGATCTTCAC CAAAGATATA TGGATAGTAA GTAAATATAT GAAAGGTTTT CACTGTTAAT GATTAAAGGA  
AATGCAATCT TGTACATGAA TGTTTATAAC AGCATCATTC ATAAGAGCCA AAAGGTAGAA ACAATCCAAA TGTTCATCAA  
CTGATGAATG ANTACACAAA ACATAGTATT ATCTATATAA TGGAAATATTA CTGGCCATA AAAAGAAATG AACTGGGCCA  
GGCGCAATGA CTTACGCCTG TAATCCCAGC ACTTTGGGAG GCTNAGGTGG GCGGACTGCT TT

SEQ ID NO:716: (Length of Sequence = 314 Nucleotides)

GTATTTTTAG TAGAGACGGG GTTTCACCGT GTTAGCCAGG ATGGTCTTGA TCTCCCTACC TGTGATCOG CCCACCTCGG  
CCTCCCAAAG TGCTGGGATT ACAGGCGTGA GCACCTGCGC CCCACCCCAT TTGGGTGIGA TCTCAGCTCA CTGCAACCTA  
CCCTCCCAA GTTCAAGTGA TTCTCTACC TCAGCCNTT GAGTAGCTGG GATTACAGGG GTCTGCCACC ACGCTGGCT  
GATTTTCTTA TTTNAGTTG AACTGCAATT TCACCAGNT GGCCAGGCTG GTCTCGATCT CCTGACAAG AGGG

SEQ ID NO:717: (Length of Sequence = 279 Nucleotides)

ATAAAAATGC TACAGATTTT TGTATGTTGA TTTTTCATCA TGCAATTTC CTGAATTGT TTTTCAGTTA TAACAGTTTT  
CTTATGGAGT CTTTGGTTTT TNCCAAATAC AAGATCATAT CATCTGCAAT CAAGGATAAT TTGACTTCCT CCTTCCAAT  
TTAGATGTCC ATTATTTTTC CTCCTGTCTG ATTGCTCTAG CTAGGATTTC CAGTACTATG TTGAATAACA ATGGTGAAAG  
TGGGTATCCT TGTATATTTC CAGGGTCTG GAGGAAAGG

SEQ ID NO:718: (Length of Sequence = 161 Nucleotides)

AAGAAAAA CATAAATAAT ATTAGAAATG GAAAAGTAT AAATCACTA CAGCAAGGNT TTAAACTAT TATGAAACAA  
ACCAAGTAGA AAGTAGATCT GCCAAACAAA AAAGGAAAGA NACTGTTTCT TTCATAATA ANTGACAATG GGGGAAAAG  
A

SEQ ID NO:719: (Length of Sequence = 220 Nucleotides)

GACAGAATTT TTTTTTTTTT TTTTTTTTGA GACAGAATCT CGCTCTGTCA CCCAGGCTAG AGTGCAATGG CGCAATCTCG  
GCTCACTTCA ACCTCTGCTG TCACAAATAA ACATCAGTAA GAGCCAGCAG TTGCTCTAGG ATCTCAGTCA GCAAGCTTGG  
GGGCTGTGAG GAAACCAGCA GTCACCTGTT TCTCCCTCTC CCAGCCAGG GCTGACCCCT

SEQ ID NO:720: (Length of Sequence = 347 Nucleotides)

AGAAATGAAA GCTACATTAA CGAAAAAGGA ACTTAGGAAT GAGGTCAATTA AATATACTA ACTACATTTT AAATACGGAT  
ATCATATATT TCCTGATTAG TATCAGGTAA ATATCTAGAC TCCTATCTG AATTCCGGTC TCAGATAAAA AGGTGAGAGA  
CAATTACAAG GAAGATGCTT CATATTATCA GGTCAGTATA TACCTAATTA TGTGCACCTG AGAGTAATTT ATTCTTCATT  
ATCATTTGTA AACATGTTT TTTACATTT TTGTAGTTGT CCATAATGTA AGCTTGTGGG TTTGATTATT GTTTTCCACA  
CTGGATCCAG CTGGTTTAAA CCTATTT

SEQ ID NO:721: (Length of Sequence = 313 Nucleotides)

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AAAAGATTTG AACAGATAAT TCATCCAAAA AAAATATGGG TGGGAAAAAA AGCACATGAA AAGATGCTCA ATATCATTAG  
 ACATTAAAGAA AATATAAATT AAAACCACAA TGCAATATCA CCTCGTATCT ATTAGAATGT CTAATATTAG CAAGACTGGC  
 CATATAGAGT GTTGGTGAAG ATGTGAACAA CTGAAACTCA TACACAGTGC AGGTGGAAAT GTAAATGATA CAATTTTTTT  
 GGAAAAGAGT TGGCTGTTTC TTCAAAGTT AACATTACA TCTGCCATAT GNTCCAGACA TTCCACTCCT AAG

SEQ ID NO:722: (Length of Sequence = 266 Nucleotides)

ATCGTGCCAC TGCACTGCAG CCTGGGCGAC AGAGGAAGAC GCCATCTCAA AAACAGAAAA AAAAAAAAAA AAAAAAAAAA  
 AGTGCAGCTC TCTAATTGGG CTCCTTACT TACTATTTAT ATAATAAAG CCACGTTCT AGGCTGTATA ATGGGGTTAA  
 TCATAGTAAG TACCTTGTAAG AGTTACTGTG ATAACCAAAT AAGTGANCAT AAGTAAAGCA TTTTACATGT GTGCAGCTTA  
 ATAAGTTGGA GTGTGACTA TTATTT

SEQ ID NO:723: (Length of Sequence = 370 Nucleotides)

ATTATTTCATG AAATAATCCA TGTAACATCA CTTAGCACTG AGAGTTAACA AAGGCAAATG TTACCTGAAT AGGAGGAAAC  
 AGAGGAAGAA CAACGAGGTC TCTTTTATCT ATGCTAAGCT TTGTCTGAAT AGGAGAGAAA TGTGTGGCCT GTTGGTGAAT  
 TTATTGCTTT GTGGTAGTAA TGGATTYYCC TAAAGCTGTT TCCCTCTGAT CATTATAAT CCTGTACAG CAAAGGACTA  
 TTGTCCCTTG GTATGAGTAA ATAACCTGT TGAAGCACC GCTTATCTTC AGACCACAGC GCATACTTCT TACTGGAAAA  
 TATAATGCAG GTGCCAACAC CCAAAGGGCA TGACCAGGGG TTCCCTTCC

SEQ ID NO:724: (Length of Sequence = 478 Nucleotides)

GGACACAACT GAAGTGTGGA AGAAATGAAA GGGCGAAGGT GTGTTTTGAG AAGGCTCTGG AAGAAAAGCC CAACAACCCA  
 GAATTCCTCT CTGGACTGGC AATTGCGATG TACCATCTGG ATAATCACC AGAGAAACAG TTCTCTACTG ATGTTTTGAA  
 GCAGGCCATT GAGCTGAGTC CTGATAACCA ATACGTCAAG GTTCTCTTGG GCCTGAAACT GCAGAAGATG AATAAGAAG  
 CTGAAGGAGA GCAGTTTGT GAAGAAGCCT TGGAAAAGTC TCCTTGCCAA ACAGATGTCC TCCGAGTGC AGCCAAATTT  
 TACAGAAGAA AAGGTGACCT AGACAAAGCT ATTGAAGTGT TTCAACGGGG TGTGGGAAT CCACACCAA CCAATGGCTA  
 CCTCTATCAC CAGATTGGGG TGCTGCTACA AGGCAAAAGT AAGGCCAAAT GCAGANTACA GGGGGATCTG AAGCTAGT

SEQ ID NO:725: (Length of Sequence = 356 Nucleotides)

GACAGAGGAG AATAAATGGA ATAACTTAGT TTTGTGAAAG ACTCACAGTA TCCTTGGTT TCTGGACACG GTTCGAGACC  
 TGGCTGTGGC TTGCTGTGGC CTGAGAGCC ATCCACAGC AGCAATGCTG TTGGACCTT TGGCTGGGAC CTTGAGGACC  
 CCTGCAACA GCACTGTGTN CCTAACCTGC TGGCATGATG CCCCCTTNT GACAGGGCTG CATAAAGGC CAGCGACAAG  
 TGGCAGGCAG TGACGCCAGC CTGGATTGTC TGAGGGCACA CGCCATGCTT CCTGCAGTGC CAGTCTCTT CTNGGTCCAC  
 TTTGCAGCAA GGATAGATGT GGTCTAGAT CCAAGA

SEQ ID NO:726: (Length of Sequence = 387 Nucleotides)

GTGGTAGAGT AAATCCTATT ATATCGAGAT ATTGGTCAGG CAAGAATTTT NCTTTTAAAA TAATTATTG TAAATGAACC  
 ATAAAATTTT NACCTTTGTG CCATCTTCTA GGCTATAAAA TAGTCTTATA AAGAATCAGA TTGTTAAGAG TATATGAAAT  
 GTGGATATGG ATGTGGAAGA TCCATAACGA GGATGATGAA AGCACATTAA GAAGCTTTCT GATGGGTACA AAAAAAGAA  
 TGAAGAAGAT CTAGTATTG AGAGCACAAC AGGGTGAATA TAGTCAACAA TAATTATTG TGCATTTTCA CATAACTAAA  
 AAGTATAATT GGGATTGTAA CAGAAAGGAT AACTGCTTTG AGGTGATGGG ATACCCCAT TACCCC

SEQ ID NO:727: (Length of Sequence = 348 Nucleotides)

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TACCTAGCTA GCCCTCAACC TCTTTGTTTT ATGAATGGAA AGGCTGGGAC CCAGACAGGG CAAGTGACTC ACCCAGTGTG  
ACAGAGCTGT TAAATGGCAG AGCATGATTG AATCGGGCCA TGACTACTTT CCTACATGAC ATATTGAAAC CAGTTTGAGG  
CCTCGGTTTC CTCTCTNGCA AAACAGAGAT ACTAATG

SEQ ID NO:734: (Length of Sequence = 374 Nucleotides)

TGGTGAAAGA AGAGAAGGAA ACCTTGGTCT GCATGGCACT TGGTACTTTT GTATTGCCTC CATGCCCTCC ACTGCAGCTC  
CTGCCCTGCT CTGTGTGCAT CCTTCATGAG ACTCAAGACA GATAACCTCT CCTTGCCCTT TCATGTCCCA GCGCTGGNTC  
TTGGACTCAA CCATCCATTG CATCCCCATG GAGGATTCTG CCAGTCCCTCA GGACTCAGGA GCAACCCAAG GATGTCCCAAG  
GGTCACAGGA AGACTTGTG AGGGGACCCA CAGGGGTGCC CACAAATTAT CAGTCCATGG AGAAAAGTAG AGAGGGAGGC  
TCAAGGACCT CAGCACGTAA GGGACATTTT GAATTCTACA AGTCACGGTG GGAT

SEQ ID NO:735: (Length of Sequence = 348 Nucleotides)

CCCAGCGCCT GGAGAGCCAG CCTTGCAGGG TGGCTGGGC GAGCCAAACT GCGTTCCTGG TGCAGGGCTT CCGGTCTCCC  
TAACAGACCT TATACGCTGA CCGGCGGCCG CCATGGCAGT GTCTCTTTCG TCAGACATCC AGGACGACC ACATTCTGTC  
AACAGCGGTC GCTCCACCAA TCCTGGGAGA AGCGAATCGT TTTCTCCGCG TGCCCTGTCA CCGCTCATG GTGCCAGAG  
AGGAATTTTA GTGGCAGCAT TCGGCTGTC ACGCCACCGA AATTGCCAGG NCACTCCAAG TCAGAAGGAC CACCAGGAAA  
AGTCAGGAAG AGAACCACCC ATCAAGGT

SEQ ID NO:736: (Length of Sequence = Nucleotides)

ACACTCTGA CCTCAGGCAA TCCTCCACCC TCAGCCTCCC AAGTGTCTGG GATTACAGGC ATGAGCCACT GCGCCAGCC  
TACACACACT CTTAATAGAA GAAATGAATA ATCAAAAAT ATTATTGTG GAAAAATGT TTGAATCTTA TTTTAAAAAT  
AATTAACGNT TTCAATAGGC ATGTTGAACC TTTTTCGGC TACTGTTTTC AGCAATTGCA GTTGAATGAG TACAAAATGC  
ACCAAGAAAT AGAGACTGCT ATCTACCCAA ATATTGCTGG TTGTTGAATC CATGGTAGGG AATTTCATG TATTGTTACA  
ACCGCTATA AATACATCCC AAAATATGTG TAGAGCTAAA ATAGATG

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SEQ ID NO:737: (Length of Sequence = 243 Nucleotides)

TTAATCATT AAATTCATT TTATACAACG AGTGCATACA CCACTGGGGG AGTNTCTGAC TGATGCGTGG GAGGGCGGGC  
GGGGATGTCT NCAGCTATGA GTAGGGAGGA GCGGGGAAG CCTTGGGTGC TTCCTCTCCT GACTGACCG CTGTGTGTTT  
GTCCCAGAG GAAGAGCGGN NGCAGTCAG CCCGGGGGGG GATGCCACAN TGGAGAGACG GACCTGCAGA AGTGGTGGCC  
AAG

SEQ ID NO:738: (Length of Sequence = 358 Nucleotides)

CGAGTCAGAG CTGGACAGCG GCGATGCCAT CTTTACATGG CCAGACCGAG AGAAGGGCAA ACTCCTGCAT GGTGAGAATG  
GCTCTGTACC CAACGGGCAG ACCCTCTNA AGGCCAGGAG CCGCGGGGAG GAGATCCTGT AGCCACCTGG TCTGTCTCCT  
CAGGGCAGGG CCCAGCACAC TNCOCGGCCA GTCTCTCTAC CTCCGAGTN TGCGGGCAGC TNCGTGCCA GCATCTGCTG  
GTCATTTCGC CCTGACAGTC CCAACCAGAA CCGCTNGGA CTTGAATCCA GAGANGTCTT CCAGGNAACC CCTCAACGAA  
GCTGTGAAAT GAAGAGGTTT CTTCTTTAA ACTGGTTT

SEQ ID NO:739: (Length of Sequence = 400 Nucleotides)

CATTTCTGGC CAGGCACGGT GGCTCATGCC TGTAATCCCA GCATTTGGG AGGCCGAGGC AGCGGGATCA CGAGGTCAGG  
AGATGGTCTA GACCATCCTG GCTAACACAG TGAAACCCTG TCTCTACTAA AAATACAAA AATTAGCTGG GCGTGGTGGC



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GCGTTAGTAT TTCCTTAAAT AACAGGTTAC AATAGAAAGA TACTGCCTGG AAGTTATCCT TTTCATTTTG GTTCATTTTC  
 AGTTTTTGTT TATGATTTAC ATAGCTGTTT AATTCATTTG CTTATAGTAC AATCCTGCCA TAAAGTATTA AAGCACAAGA  
 TACCIGTTAT TCCCTCAAC ATCTGCATTT TTCAAGNIT TTATACTCTA TATCCACAGT ATGTCAGCAG TTCTTGACTG

SEQ ID NO:740: (Length of Sequence = 374 Nucleotides)

ATCGTCAGAT TCACCAAGGT TGAAATGAAA TAAAAAATGG TAAGGGCAGC CAGACAGAAA GGTCAGGTTA CCCACAAAGG  
 GAAGCCCATC AGACTAACAG CAGCTCTCTC GGCAGAAACC CTACAAGCCA GAAGAGAGTG GGAGCCAATA TTCAACATTC  
 TTAAGAAAA GANTTTTCAA CCCAGANITT CATATTCAGC CAACTAAGC TTCATAAGTG AAGGAGANAT AAAATCCTTT  
 ACAGNCAAGC AAATGCTGAG GGATTCTGTC ACTNCCAGAC CTGCCTTACA AGAGGTCTG AAAGGANGCA CTAACATGG  
 AAAGGGNATA ACTGGTACCA GNCACGCAA AACATAACCA AAATTGTAAA GGGA

SEQ ID NO:741: (Length of Sequence = 290 Nucleotides)

AATTATTTCA TAATAATGTA ATAAACATTC ATGAACATAC CCTATCAAGC AAGAGCTAGA ACCTTGGCAA TCATTTCTTT  
 GACTCCTCCA GTTTGIGGCT ATCATGATAT TCAGCCCCAA GTTCATCATT TCTGTTTTIN CTTCTATACA GGTTCCTTAT  
 ATGTATTTCT AAAATCATT GGTATTTICA TCTTTGTAAA AAGTCATGT NCTATTTTCC CCACIAGTTC TACATTCAT  
 TCATATTGTT GTGGGTGTG GTAATTCATT NATTTTGACT GCTGTATAAT

SEQ ID NO:742: (Length of Sequence = 274 Nucleotides)

TTAAGAGGAA AAGTATCTTT AGGAATTTNT TTCTATAGAG TTCTTCAITTA ACATTTATAC GAGTTTTTTG CTGAGTCAGA  
 TGGACAGTTG GGTTCGATG CTTTINCTT CCCGCTGCC AGGCTGGCCC AGGCAGTGCT CCCACCANTC TATGAGCGIN  
 TCCGGGGCCG NGGATCTGGG CAGCATCCAT GGTGCCGGGG CCATCCCCAG CGGNACCACA AGGTNGCAGC GTTGTTCAC  
 GAAANACCGN CTTTCGGCTC TGCTTCCCCA AAGG

SEQ ID NO:743: (Length of Sequence = 398 Nucleotides)

TTGCTTTGCA GTTATCTGGA ACTOCTGTG CTCTTTCAGG AGCTCCTGGG TGIGCTGTAT ACTGGAGCCC GTGGAGGTGT  
 GTGTGGAAAG GTAGAAGTCG CCATTGTCAT GGATCCATTC CAAAGCCTGC TTGGCACTCC TCTCAAAGAC CACGTACTGC  
 TGACACTGGT CCAGCGTCT CTCTCTCATG GTCCAGTAAT GCAATACCCT GTTCTCCCGT TGGAGAGATT CATTCAAGAT  
 ATTTTTCACT TGCTGTTCAG GAGCTTTGAT GTGGCTCACC ATTCTGGCA TGTTCAOGCT TGTTCCTGTG CAGGTATTTT  
 AGGAAGACGT CTGCATINCT CCGAGCAAGN GGTGCAAGCC TTCAGGAATG CCTCCTTTNC TNCAGGGTGC GGTTTTCA

SEQ ID NO:744: (Length of Sequence = 359 Nucleotides)

TGCGACAGAG TCTTGCACTG TCACCTGGGC TGGAGTGACG TGGTGCAATC TCAGCTCACT GCAACCTCTG CCTTCGGGT  
 TCAAGCCATT CTCCTGCTC AGCCTCCAG GTAGCTGGGA TTACAGGCAC CTGCCACCAT GOCAGCTAA CTTTTGTAT  
 TGTTTTTTTT AGTAGAGATG GGGTTTCACT ATGTTGGCCA GGCTGGTCTC AACTCTCTGA CCTCGTGATC TGTGCGCTIN  
 GGCCCCCAA AGTTCIGGGA GTACAGGCGT GAACCACCGN GNCGGCTGG GGCTGCTTAT TTAATCCCC TAGAAGAGG  
 GATTCINAG CTACACCACA CCCTTAACCTT NGAAGGACC

SEQ ID NO:745: (Length of Sequence = 361 Nucleotides)

CCCTTAATTA AAAGTTTTAT TTTTAAAAA CGTAACAGAC CACTCTAAGA AACTTTGGCA TTCAAAGCAG TAGTTACTGT  
 TATTTGCTAA CTCTGAAAAA AAAATTTTNC CCTCACAAA CAACCGGCAA ACTCCTGCCA CTCTAGCT TGGTGGCTGC

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CAGCGTGCAC TGCAGGGAAA CGGTGGGTGG AGGGATAGGA AGGCCCTCAC GCTCCCAACC CACGGAGAAA NTGCAGATGG  
TGACAAGCTG CATCTGGACT CCAGNTGTA TCTGACAAAG AGGGAGATGG TNCCTCCTNT CCCCTNCACC AGCTCCACTT  
TINCTGCTGA AGAAACAGAG ATGTGGAGGC AGGCGTGACC T

SEQ ID NO:746: (Length of Sequence = 285 Nucleotides)

GTGTTTTTAT TTATACCTAC AAAAAGAAAA CAAGATGATG GTATCAAAG GACAATTTAC AACTAAGAA TAGTAACATA  
GCTTTCAGCA TCCTGTGCCT GAACATCACA CATCTACAAG TCTTTCAAGN CTTAATGCAA CAGGAATNTG TCTGGAGACC  
AGCAAGANCA TCAATAGAGA GCACTGNTCC CAAGCAAAAG CCACTAACCT TTTAGATGAG AAGTCCACAC AACGGATTNT  
TAGGGGAGGA TTTGGGNGAA GCAGCCCAT TGCCTAATAC ATTGG

SEQ ID NO:747: (Length of Sequence = 302 Nucleotides)

CAATGCAGTT TTAGAGTGCT CATTCTTTCA ACTTATTTGA CAAATATTTA CTGAATGTCT GCCATAAGGC AGTAAAGGCA  
CAGAAAGACT CAAAGCCTTT TNCCTTAT GGGGTGTAAT TNCAGTGGT GGAGACAGAC AATGAGCAAG TAAACAATCA  
ATCGGCTAAT GATACTACT GTGAAGAAAA TAAAGCAGEN CAAGGGAATA GAGTATGCCA TCATTAAGAC TGGTTAGGGA  
AAGCTTCTTT GAAGACATGG CAGCTATGA AAACCTGACT GATACAAAGA AGCAAGTCAT GT

SEQ ID NO:748: (Length of Sequence = 346 Nucleotides)

GAGACCAGCC TGGGCAACAC AGTGAAACCC TCCTCTCTAA AAAGAAGAAA AAAATAAGAG TTTTGAGTTT TTCAAAGAA  
GAATGCTCAG TACGTTTGIN ACTATCAGA AAGAAGAATC TGGAGGTCTT GACGTGTAAA CAGAGTTGTG GGTACCATCT  
CACCAGAATT GCTGCCCTGA AGCCAAAGGA CTGAGCTGCT CAGATCTGGA AGTAATCTGA GCCCCCATTT CCAAGAAGAG  
AATGTCAGAA TTTTATAGGA AGAAGGGACC TGATCCCTGT CAATGGAAGC ATTTTAAAT TTTTAACTGA AGTCCAGGA  
GCATACAAAA AGCCAGGNAA TTTACC

SEQ ID NO:749: (Length of Sequence = 325 Nucleotides)

CTAACTTTA TTTTCAAAG CTTAAGGCC AAATACAAAC TGAGGTCTTC CTTCTAACA AATTAATACT AAAATGAAC  
AGCTTTTINT GTGCTCTTA GACAAATAA GGAAGGAAA CGTAGCTGCA GTTGTCACG ATGGATATTG GTTCTTTAAA  
ATATATCTGA AAGTAGTAGT CAGAATGANT TATGGTTGGA AACTGAGN ATCTTCTGGT TGCAGGTGCA AAGTGACTTT  
NTTATCTT GTCTCAGTCT CCTTGATAGC CACTTCACTC TGCTACTACT CACTTTCTC CTAAAATAC TTCATCTATT  
TTCAG

SEQ ID NO:750: (Length of Sequence = 341 Nucleotides)

TGTATTTTNA GTAGAGAAGG GGTTCGCCA AGTTGNCAG GCTGGTCTCG AACTCCTGAT CTCAGGAGAT CGGCTGCCT  
CGGCTCCCA AAATGCTGGG ATTATAGGCG TGACACTGTC TCTGGTTTAA GAGAACCATG GGCTGAGATA TINAGGAATT  
CTCCAGGCCA CGAATCTTGG GGCATGCAGC CTCTCCGTA CCCACAGCA TCTNGGGGAG CTGGTGTGCT GATGGGGTCA  
GCTCTCCAG CTGCTGGAA AATTCTCAGA CACTCCCTAA GAGGACATCT CCACCCCTNC CACTCTNAG TCACTGCTTT  
CTAACATGC TCATTGTIT G

SEQ ID NO:751: (Length of Sequence = 377 Nucleotides)

TTTTTTGAGA CGGAGCTTNG CTCTGTACCC CAGGCTGGAG TGCACTAAGC CCATCTCTGC TCACTGCAAG CTTACACCAT  
TCTCCTGCT CAGCTTCCCA AGTAGCTGGG ACCACAGATG CCGGCCACCA TGCCCGGTA ATTTTTTGTG TGTGTGTTTT  
TAGTAGAGAT GGGGTTTAC CATGTTAGCC AGGATGGTCT GGCCCTCCAG CTTCTCTGA GTCCCTTCAT AAACATTGT

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TTATCTGTGA AAATAATTG TTCCATTTCT AATTAGTACA TAATGAGAGA GGCAGTGTGA TGGTTTGTGC CTAAGNCCTT  
TCTTGCCAAG ACTTTCAAAG CCAAAAACCT CANCAGTTTT CCTAGATGAC TAGACAG

SEQ ID NO:752: (Length of Sequence = 359 Nucleotides)

AAGTCAGGCG TTCTGCGGC AGCTGTCTG TGAAGTTGGT GGGACGTGCT ACCCTGGGCC AGCTCCAGGT GAGCNTGGCT  
TOGGTGGTCC CCGTGGGCTC CTNAGTGGCG AGGGTGAGGC CTGGCACTGG GCCTCTAACT GGCCCGTGG CCTGTCAGTC  
TTINGTCTG GTGTCCCGCT TGCCCTTTNT CCGGCTGTTC CAAGCGCTGC TAAGCCTCAT CGNCCCNAG TACTTTNACA  
ANCTGGCGCC CTGNTGGAA GCAGGTGAGT GGCCATCANT CGTGGTCATC TTGNTCAT NATCCAGCT TTGGCCCTG  
GTTGGGCTCG GCAAGCAGCT TCTCCTTGGG GAGGGTCTT

SEQ ID NO:753: (Length of Sequence = Nucleotides)

AGCTTCAACT TGGAAAGAAG GATGATGCAG TTTTGGGCCC TCCGGCCATC AATNACGAC AGCNTTTGA CCTTGGCGGA  
AGCCAGGTAT ATGINTCAG TGGAGCCAG CTCCTTCTGG TGCTCTGGT AGGCTGAAA CATCTTTCA AAATCCTCTA  
GGTCCAGNT CCGAAATACC TGCATGTCAT CAATCTCATT CCATACGGTG CCAGGGACAC GCTCCTCATT CAGCTTCACC  
CAGTTGAAGG ACTTCAGTGG GTGAGAAGGC TGGGGACAC GCTTTTCTCT GAGTGGGACG

SEQ ID NO:754: (Length of Sequence = 342 Nucleotides)

CTGTGAAGT GCAGGTTTGA TCCAGCCAGT ATAGAAGTAG CTCTGTAGGG GTGAGGAGGA CTGINTGTG TATCATCCTT  
GATTGNTTC CTTCAAGGAG CATGCACTG TAAGTACATC AGAATGACAA ATTGATGAAC TGCAACAGTA TCTTTTGTG  
AATGTCCAC ATAATGCAA TGCCATAGT TGTGTGAATA TTATGTTGGA ATACAGTGTG GATATCTTG AAAACCATAA  
CTGCTCTTA ATTTAACATA GNGTAATACA TAGTNTGTGA TTTTNTTAA AGTGAGCTNT AATGGGNAAG TATTTTNTAT  
ATGCTTTAGC TATAGCTAAA GG

SEQ ID NO:755: (Length of Sequence = 321 Nucleotides)

CATTGCCATC TTCTCAGTCC TTCTCCCTTT CTTCCTCAAGT AGTTTACGGC CCTAGGGCGA AGGTGGCTTT TATTTCTCT  
CTTGGGGAAG GAGGGGGAGG GAGCTTTCCC AAGCACATCA ACCTAAGGAA GGGGTGGTTG CCCCCCAGC AGOGAGGGGC  
TGGAAGTGT GATCATTCGG AAGGAAGGT TCGTCTTGT CCACTTCTG GCCCTTGGCT GCAAGGGTGT GCTTNGCAGG  
GGTCACTCCC CTTGGGGGTG GCAGCTCCTG CATCAGTNGA GGCACAAGG AGGTATCTGC TGGTGTTCAC GAAGAGGAGG  
G

SEQ ID NO:756: (Length of Sequence = 368 Nucleotides)

TGGCATGGTT GCATGTCCT GTAATCTCAG CTACTTGGAG GCTGAGGCAG GAGAATTGCT TGAACCTGGG AGGTGGAGTT  
TGCAGTGAAG CAAGATCGCA CCACTGCACT CTAGCCTGGG TGACCGAGCA AGATTCATT TCAAAATAAA TAAATAAATA  
AATGAGAAAA AAATATAGAT ATAGTAAAGG GAACAATTAC ATTCTACAAT ATTTTAGCAG AAGTAAATAT GGTTTAATT  
AATGGAAACA GCTCTGCTCT ATNGAAATTT CACAAATATT AAAAATAAAC AACTCTACA TTAAACCTCT GAGCACTAGA  
NGCTTACCTA CTTATTCATA GGGCTCACAT ACTGTAAGGG GGGTAAAT

SEQ ID NO:757: (Length of Sequence = 339 Nucleotides)

CTTCACTGC CAGGTATCG TCCGGGAAG CCCCCACCC CTTGNTTTC CTCTCCGCT TTCCCTAAC CCTCTCGCG  
GGGCATCTAC GNTCTGCTCT CCGCTCTCT CTNCTCGAAC TCCCTTGTG CGTGGCGGT GGGTCTCTGG TACTGCTGGT  
ACTCGGACAC CAGGTCTGTC ATGTGCTCT CCGCTCTGGT GAACCTCATC TGTCCATGC CCTGNTCCGT NTACCACTGC  
AGGAAGGCCT TTGNTGGAA CATGGCGTG AACTGCTCG AGATGCGCTT NAACAGNTCC TGGGATGGCC GTGCTGTTTC  
CGATGAAGGT GCGCGACAT

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ACAAAGTTGG AAGTACTCCT AATGGAGCGA AAGATTGCCT AAAAGCCATA ATGAAAAGGG TAAATCATAA GGTTCACAT  
 GTTGCTCTGC AAGCACTAAC TCTCTTGGG GCTTGTTGGG CAACTNIGG AAAGATATTT CATTTAGAAG TATGTTCCCG  
 TGGATTTTNC AACAGAAGTA CGTGCTGTGA TTAAAAATAA GGGCACATCC TAAAGTATGT G

SEQ ID NO:765: (Length of Sequence = 329 Nucleotides)

TTGTCTGCTT GATGCAGGAG CTGAGGAGCT GCACAGAAGG TTAAAGAGC TGTAACACAA ACAGGGCTGC AACATGCCCC  
 TTGCTCCCCA CAGGGAGAGA AGAGCTCTGG CCTCGGAGA AGCCAGACC TGGGAGCTCC TTGAGCCCGG GCTGTGACTC  
 CCTCTTTGGG GOCCTGGTTG GCGTCACTGC ATTGCCAGT GCCACTGTTG GAAGCTGCTT GTNATGCGCC TGGTCCAGGG  
 GGAAGCTGTT TGTGTGTGTC CTGGTCCAGC CACCTCATGG AGAGCCTGTG CTGGCACCTG GGAGCTGCC AACCTGGGCA  
 GCAAGCTTT

SEQ ID NO:766: (Length of Sequence = 321 Nucleotides)

GCAGTGGCAG GTAGATTMTA TTGGCCTGGG ACACACAGGG GATACCTCA CCCACGATGG GTTGGGGGGT GTGGTGTGA  
 AGATAATAATC TNATGGTCAC TTGTGGTAGA ATCGCGGGTT CTGGCTGINT TGGATGAAGG GGAGCCGAGG GCCAGGTTGG  
 CTGGTAGCTG CAAACCGAC TTCTCTGCTG GCTGCATCTG CACAGGGAGC TGGGGGGAAG CAAGGAGTCC AGGGGCTGGA  
 TGCAGAGCTT GAGTOGGAGA AGCCAGTCTG CTGGTAGCA TGTNCCATCT GCTTTTNC AA GNCAGGGCA CCACAGGCT  
 T

SEQ ID NO:767: (Length of Sequence = 313 Nucleotides)

ACCGCCCTC TAGTTCACTA TTCTGTCCCC GGTACCCAGG GCATCATAGA CACTCAACAA CCATTGTTG AATATGCAAT  
 TGGATGAAAT GAATAACGA CCAGAGGAAT AATCCAGACA GAGCAGCAGT GGCCAAGGGA AGGGAGGATT GATTTATGGG  
 AGAAAATTAG GGAATGAAA TCCATAGAAA GGGTTTGCTT AAGTNAGAGT GATGACTINGA GCCAGAAGAC ACCCGGGGGA  
 GAGGAATINT TTCACATGGT AGGAAAAGGG GAGGAGGGAG AGAGGTGGGG TGGTGGAGIN CAGCCTCGAG GCT

SEQ ID NO:768: (Length of Sequence = 372 Nucleotides)

TCTCTCTCT GCGTGTATAT ATTCTGCAGG TCCTTAGTAA CCCCCTGGGC CCACCTCTTA CTAGGTCTC TCCTAACATG  
 TATCTATGAC ACATTGATCC CTAACAGCTA TGATTCTNCT TATACTTTIN CAGTAATTTA AATTTTATCA TTCTACTGCT  
 TGTTCATATC ATCTCTCTAT GTAAATCTTG ACTCCATAAT GAGGTTTTTA ACTTCGAAGG GGTGGAGT TATCTGCTGC  
 CTGTGATCCC CCCCOCATT ACACAAGAGT ACATTTTAAG CACATTACAC CTGAGTGATT GINGTAAAC ACAGATGCAA  
 TCTTTCCACC ATCCTCTAGG AATCTCTCTG TGGGCTTTCC ATTGGGTTAC CC

SEQ ID NO:769: (Length of Sequence = 321 Nucleotides)

GCAGCCAGAG CTCGAAGGCT CCCCAGGGGG AGGTGACCGC CGAGGAGGCA GCAGGCGCTT CCCCAGGAA GGCCAACGGC  
 ATGGAGAATG GGCACGTGAA AAGCAATGGA GACTTATCCC CCAAGGGTGA AGGGGAGTGG CCCCCTGTGA ACGGAACAGA  
 TGAGGCAGCC GGGGCCACTN GCGATGCCAT CGAGCCAGCA CCCCCTAGCC AGGGTGCTGA GGCCAAGGGG GAGGTCCCCC  
 CCAAGGAGAC CCCCAGGAG AAGAAGAAAT TTNNTTCAA GAAGCCTTTC AAATTGAGCG GCTGTCTT CAAGAGAAAT  
 C

SEQ ID NO:770: (Length of Sequence = 364 Nucleotides)

TTAAATCAGG AAATGTGATG CCTCCATCTA TGGTTTTTGA AAGTCATCAG CCAGAGCTAA GGTAAATGAGG ATTCCCTCCT  
 TCATGTTTAT ATGTCTTTAC ACTGTGCACA ACTGTCCCTA AAAAAACAAA CCCCAGGCA ATTTCTCCAG GCTTATGCTC  
 TCCCCGTTT CAGTTACATT TCAGCTTAGC ATTTTCAAAA TAACAAATTG TTCTTGGCAG CCGTCTATA TATTNATTT

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ACCTCTCTTG TTATCCCCAC TTTTCATGCT CTATGTCCCA TAGGCAATTT GACAAAGACT GCTTTGACAA AGGATTCCCTA  
GACTTCTATC TCTACCTCTC ATCTGACTTG GCGGAGGAT TAGG

SEQ ID NO:771: (Length of Sequence = 357 Nucleotides)

CAGCTCACTG CAACCTCCAC CTCACAGGTT CAAGTGATTC CTTCCTCAN CTTCCCAAGT AGCTGGGACT ACCGGTGCAC  
ACCACCATGT CCAGCTAATT TTTGTATTTT TNATTAGAGA CAGGGTTTCA CTATATGTTG GCCAGGCTGG TCTCAAACCTC  
CTGACCTCAA GTGATCCGCC CACCTCGGCG TCCCAAAATG CTGGGATTAC AGGTGTGAGC CACCATGCCC GGCTAAATT  
ATAGCTATTT TAGAATGTTG AAAGTAGTAT TATGTGATTT CAGTTTGCCA TAAATTTTTC ATATGGTTAC TAATTATTTT  
TNTTTTGTG GATATATCTT CTGGAAATCT ATTGAGG

SEQ ID NO:772: (Length of Sequence = 359 Nucleotides)

CCTCTCAGGA AAACACCTAG ACATTATGTA ATGTATTGTA AGATTAAATG ACCCTTTAAC CAGCAGTTGT GTACCTAGGT  
ACAAACTTTG CAAGCACACA CGCATGINTG TNCCAAAAG CACATACAAA AACACTCCTA ACAGCATTAT TTGTAATAAT  
AAAATATAAG AAATTACCTA AATATCCATC GACTGCCATT GGTAGTATGG TTATACAATG GAATCTACA CAGCAATGAA  
AAGGAGCTAG AGCTACATGC AACACATGG ATACAACCTCA CAAACGTAAG ACTTAGTGGG AAAANGCTAG ACACAAAGTT  
AACACCTTCT ATATGTGGGT TCCAGTTATA TAAAACCA

SEQ ID NO:773: (Length of Sequence = 361 Nucleotides)

GAGCCTACGG CAGAAAAAGA AACATCTTCC TATAAAACT AGACAGAATA ATTCTCAGAA TCTGCTTTCG GATGTGTGCG  
TTCAACCCAC AGAGTAAAC TTINCTTTTG ATAGAGCAGT TTGAAACAC TCTTTTGTGA GTATTTCAT GTGTATATTT  
AGAGCGCCTT GAAGCCTACG CTAGAAATGG AAATATCTCC CCATAAAACC AAGACAGAAG CAATCTCAGA AACTAATGTG  
TGATGGCTGC ATTCCACACA CACGGTGGAC CATTTCTCTT GATAGAGCAG TTTTGAAACA CTCTTCTGT AGAATCTGCA  
AGTGGGATAA TTGGGACCTC CTAGAGGGCC TTCGTTGGAA C

SEQ ID NO:774: (Length of Sequence = 387 Nucleotides)

GTTCGCTCT TGTTGCCAG GCTGGAGTGC AATGGCGCAA TCTGACTCA CCACAACCTC CGCCTCCAG GTTCAAGCAA  
TTCTCTGCC TCAGCTCCC GAGTAGCTGG GATTACAGGC ATGCGCCACT ACCCCAGCTA ATTTGTATT TTNAGTAGAG  
ATGGGGTTTC TCCATGTTGG TCAGGCTGGT CTGAACCTCC TGACCTCAGG TGATCCGCT GCCTCGGCT CCCAAAGTGC  
TGGGATTACA GGCATAAGCC ACTGCGCCCA GCCAGAAGAT GCATGATTC TTAGGATCAT ATGCTGTTTG TAGCCATAAG  
GTAAATCATG TCTCTTCAA TCATGACTTT TGGGAACCTC CTGAATAATA AAAATGAGAG TTGAGAT

SEQ ID NO:775: (Length of Sequence = 401 Nucleotides)

GAATTINTCT TTCTGCATCG TTCTGTCATA AAAAGGGTGA CTACTATAGA ATAGAATGCA GGCTTAGGAC CCCCCTAAGC  
TCACTGTTCA ACCCAGCCCA GCAAACCTGGT CAGTTATAAA TTTNCTGCA GGTCCCTGAA ACAACAACAA AAAACTGGAT  
GAGGTTTCCC TCCATCTTG TTTTATGTCC TTGGGAGCTT GACCTTATAA CCATACGGCG GTACTTTTNC TTGGTCTCTG  
CCATCCAGGG AACCAGAATT TGGGGGGTGA TGTCATAGTT AGCTCTAAAA ATTATCTTGA GCAGTTAAAA GCCTTTGCAA  
GCTTAAATTT GACTGCTGTA GGTCTCTCT GGGGAAGGAG CAATGGGAAA CCTTNCCAA GCTTATAGCT CACCAGCTG  
A

SEQ ID NO:776: (Length of Sequence = 345 Nucleotides)

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AACACTGGGT AAGCACTTTG TATGINCTGG GCACTCTGCT AGAGATAATG TGTCTGGAAT TGGTGGGTTT TTGGTCTCAC  
 TGACTTCAAG AATGAAGCCG TGGACCCCTG CAGTGAGTGT NACAGCTCTT AAGGTGGCGC GTCTGGAGTC TGTCCTTCT  
 NATGTTTCAAG TGTGTTTCAAG GTTCTCTGCT TCTGGTGGGT TCGTGGGTCT CGCTGGCTCA GNGTGAAGC TGCAGACCTT  
 TNOGGTGAGT GTNACAGCTC TTAAGGCGNC GGTCTGGAG TTGTTCTGTC CTCCCGGTGG GCTCGTGGTC TCGCTGGGCT  
 CAGGAGTGAA GCTGCAGATC TTCGC

SEQ ID NO:777: (Length of Sequence = 229 Nucleotides)

ATTGGGGGAA CCAAGCCCA NTAATGCTAT GGCTGTGCA GACTTGTAGA GGTACTGCCT TCATGGTCTT NGGTAAGATC  
 TGGGAGAATT CCTGGATTA CCAGGCAGAA ACTCTNATTC TCTTGCCCTA CTCCCCCA AACAAATNAG TCTCTCTCTC  
 TCTCTGTCCT GAGCTGCCTA GAGCTGAGGG AGGGGGTGAC ACAAGCACAG CTATGTCACC AGGAAGCCA

SEQ ID NO:778: (Length of Sequence = 361 Nucleotides)

CAGAACTCA GGAATAAAGC CATTAACCTT CAAAGAATAT GTGTGTGTGT TCGATATTTT CCATTCCTAA TCCACATCCA  
 CGTTGGTCAA GTAGAGCTTC CTAAGCAGAA GCACAGCAGT TGCCATGGTG TTCTCTTCCA TCTGAAAGCA GCAATTTTCC  
 GCAGCGTCCA TTTACAGAAT GTGCCATATT TACTCAGATT CTAATGTATA TTAAATATGC TTTGGAACT TAACAAGAAA  
 CGTCAAGCN CTCAGTAAAG AAAAGTTGTA GAAAACAAA ACTGAACAGC AGGCTTCTAG TTTCTCTCTT CCAAAATGG  
 CCTAGTGGG ATTCAAAAT GGAAGTGTG AATAAACTG C

SEQ ID NO:779: (Length of Sequence = 392 Nucleotides)

CCTAAGATGC CTGGCACAAT CAAAGACCTT TGGTGGCTTC CAGCATTTAT AAGGCAGAGT CCRAACACAC ACTTAAGAAT  
 GACTTACTCC TCTGGCGGAC CCCACATTC CCTCAACCCG CTTTGGCTCT GTCTCTCTGT GGAGCTGCCC CTGCCCCTAA  
 AACTGCTTC CTCTCTACCA ACCCGAACA TATTTCCCTT CCTCCCTCA CCAGGTCCAG CAGTACCCAC CAGTTTGTG  
 GACATCTCCC CAAGGAGCTC TCACTATCA GAAGCAAGGA GTTAGCCTTC AGCCCCACT CTGTGCTCTA GGTCTACAGT  
 GAGTCTCCAG TGATGCTTCC TACGACTGC TTGGGGGTGC ACAAGAGTNA GGCCAGCAAG ATNCCAGCGG AA

SEQ ID NO:780: (Length of Sequence = 453 Nucleotides)

CCTCTATTTT TCTCTTTTCC TTTTGACCTA CCATAGGAGA CAGATTGCTC ATCTCCAAAT TTCTCTGCTG TCTGGGGANT  
 GCTGGTTT CAACCTTGGT TAGGGTTTGG CTTAGGAATA GCATAATATC CCTTTGTGAG AGGTAAACA CTTGAGTTAA  
 ATTTTGGAGG CCAGGTGTGG TGGCTCATGC CTGTAATCCC AGCACTTTGG GGGGCCAAGG TGGGCAGATC ACGAGTCCAG  
 GAGATCAAGA CCATCTTGC CAATATGGTG AAAACCGTCT TTTACTAAGA ATACAATAAT TAGCTGGATG TGGTGGCACA  
 CGCTGTGGG TCCAGCTAC TTGGGAGGCT GAGGCGGAG AATCGCTTGA GNTGGGGAA GTGGAGGTTG CAGTINAGGT  
 GAGATGGGC CACTGCACCTN CAGCCTGGGN TGAGAGAGCA AGACTTCCGT TTC

SEQ ID NO:781: (Length of Sequence = 306 Nucleotides)

AAGCTACTCG GGAGGCTGAG GTGGGAGAAT CGTTGAACC TGGGAGACGG AGGTTCAGA GAGCCGAGAT TGGCCATCA  
 CACTCCAGCC TGGCGACAG AGTGAACTC CATCTCAAAA AAAAAAAAAA AGAACCAACA CTNCTACTGA GAAATAGATG  
 NTOCCATTAA CAGTTTAGAA AATGTATATA ACTCTAATCC ACAGAGGTTT ATACTTACAA GCACTCATG GTTCCCTTT  
 TAAGGGCCAC ATGTGGAAA TTAATCTGAA CAGTTAGTGC AAGGAGGAGT CATACTCAG TGGAAA

SEQ ID NO:782: (Length of Sequence = 443 Nucleotides)

GTCTGGGCT CCTGACCTCA GGTGATCTGC CTGCTGGC CTCCCAAAGT GCTGGGACTA CAGGCATGAG CCACTGCACC  
 TGGCTAATT CTACATTTN ATCTACAGCA GACCTTTTAT CATAAAGAG TTCTATAAA ACATTTCTCA AAAGAAAATA

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TGTATTGACA TTCTATTTTC TTCTCCTCC AGATACTATT TTINGGATTT NAAACATACA CAATACTTAG GAGACTTGTT  
 TTACTCAGAG TGGAAATTT TNCAGGGAC AAAGTCAACA CAANGAAACA AACAACAAA AATAGCCAGA AAGAGAACAG  
 TTAAGTGCAG CTCGGTGAGT CCGGCAGTT CCTCCCGGC ACTGGCTGCT CCTGGGGTT CTCAAGGTT CATGCGGCCA  
 CAGCGTCCGT CCACCTGTT CACGNGAGCC ACATGCTGGA ATT

SEQ ID NO:783: (Length of Sequence = 350 Nucleotides)

CATTGAGGCC GGGCAGTG ACTCATGCTT GTAATCCAG CATGNTGNA GACATAGCAG TAGGGACTAT CGACAAAGAA  
 ACACACAGAG GGAAAAAGAA TTCCACATT GGGAGGCTGA CGCATGAGGT TCACCTGAGG TCAGAAGTTC AAGACAAGCC  
 TGGGTAAACAT GGTAACCCC CGTCTCCACT AAAAATACAA AANITAGCTG GGCATGGTGG CCTGGGGCTG CAGTCTCGAC  
 TACTTGGGAG GCTGAGGCAT GAGAACCCTT TGAACCCGG AGGTGGAGGT TGCATGAGC AGAGGTCATG CTACTCTCAA  
 GCCTGGGGCA ACAGAGCGAG ACCCTGTCTC

SEQ ID NO:784: (Length of Sequence = 265 Nucleotides)

ATAACTGAAA AATGGAAGAA AATATTTGCA AATTACACAT GTGAAAAGCA GTTAATATCA AAAATATATA AGANACTCAA  
 AGGACTATAC AACAAAAAAC AAATAACCAT GAAAAATAAG CAAAAGATAT ATATAANTNA TTINCAAAGA AAGACATACA  
 TATAGCTTGG CAGATAGATG AATATGGCTC AAGTCAATT ATCATCANGG AAAGGCAAAC CAAACAACT CTAAGATATA  
 AACTCACTCC TGTAAANTG TTAA

SEQ ID NO:785: (Length of Sequence = 363 Nucleotides)

GTAAAGNTTG AGAAATCGGA TGGTIGCTGT GTCTGTGTAG AAAGAAGTAG ACATGGGAGA CTTTTCATTT TGINCTGTAC  
 TAAGAAAAAT TCTCTGCTT TGGGATCTGT TTGATCTATG ACCTTACCCC CAATCCTGTG CTCTCTGAAA CATGTGCTGT  
 GTCCACTCAG GGTAAATGG AAAAAAAAAA AGAAAAATGA AACCAGGAGT TGGCAATTAC TTTTITTTTT TTAAAGACA  
 GAGTCTTGCT CTGTACCCCA GGCTGAAGTG CAGTGGTGAG ATCTTGGCTC ACTGCAACCT CCACCTCCCA AGCTCAAGTG  
 AATCTCCAT GCCTCAGNCT TTCAGAGTNA CTGGGGATTA NAA

SEQ ID NO:786: (Length of Sequence = 291 Nucleotides)

AACAACAATC AGCCACAATG TGCTTTTAAG GATTTAACTG ATAGTAAAGA TAAATGTGAG TTTAAGAAT GGGATTTTAA  
 GACTAGGCTG ACACAAGGGA TCTTCTTINA ATAAGNICT TGAGCATTTG TTTTITTTGA GCTCATCCTT AAGGGCTGGA  
 CAGGAAGAAT CCTGTGTTAT GTGTGCATGT TGAGCAATGC AAAAAACACT CTGCCAAATC CTNGATACCA CATGGTCTNG  
 AGAAATGCAT GAGTGATTTA ACGCACGGNT GGGTGTAGTC ATTATGTTCC T

SEQ ID NO:787: (Length of Sequence = 256 Nucleotides)

TATTTCTGTA TAATTTINAT TATGACCATA AAAATAACAA TGTAGTCAAT AACAATTTAA TTGTACATTT TAAAATAATT  
 AAAGTATATA ATTACACTGN TTGTAATAAA AAGTATAAAT GTTAGAGGTG ATGGATACCT TATTTACCCT AATGTAATTA  
 CTACACATG TAGGCCTGAA TGAAATATG CCATATAAGG CATAAATATA TACACATACT ATATACCCAC AAATACCAAT  
 AATAAATTC AATAAG

SEQ ID NO:788: (Length of Sequence = 322 Nucleotides)

GGTCCAATGA AGCTTCAACT CGTTTTCAGC TCAAAGCAGA CGSCAAATCA GCAAAAAGCA AAAATAATGT ATCTTACTGC  
 ATTACAGACA AAAAAAAAAA AAAAAACAGA GTGAACTAG ANCTATTTTC AATAGTAGTT TTCTGACAGC TATATAANCA  
 AATATAGANG ACATTATGGA ATTAGTGATG TGAACGAGAA CTGTCCATG TATCCTGCCT GCCAGCAAAG GTAGAGATGG

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CIGINATATT TGTAAATGGTT TACTATGAAG GCTGTTCAT AACCTNCAAT ATCCACTGNT CTGGGGTGGT ATACCAAGGA  
TA

SEQ ID NO:789: (Length of Sequence = 357 Nucleotides)

TCAATGTGGC ATTTGTTTTT NTAGAAAAC CCCTTAGTAA GCATTCTCTT AACCCAGAAT AGACACTGGG TATCCTCCAA  
GAGTCCATA GCTTTCATTT CATCTTCAC CCTCTTCTGA GAGGGGGAGG CAGGGGATAG GGGTGGTGTG AGGCAGTCTC  
CAAAATGCCC CTCCTAGACC CTTGAGAGAA TTCATGTTGC CAGCAATAAA CCAACAGCAC CTCAGTGGGG CATCANAGGG  
CCCTCTAGGC TCAAGGCTAT TGCCAAAGGG CATTCCTGTT TTATGAGCTT CACGATGGGA ACCAAGGNAG GCTCTOGCAA  
GACTTCTTAG GGGCTTGGTC CTTCAACTTA TGGGCT

SEQ ID NO:790: (Length of Sequence = 366 Nucleotides)

TGGCCAGGCT GGTCTTGAAC TCCTGACCTC ATGATACACC CGCTTGGCC TOCCAAAGTG CTGGGAATAC AGGCGTGAGC  
ACTGCACCCA GCGTTGTGTG ATCTTTTAAA GTACAGTTC CATAGATTTA CATTAGAAT AAAAAGTCA TGACATCTTG  
CTTTTATATG GCAGTTTACT CAAGCTTTTT AAAGAAAGAG CATTTCATCTT GCTTTTACGT GGTTTTAGAA TGTTGAAAC  
CTTTTGTAA ATCTGAGTAA TTTACTGCAT TTNOCATTAA TTCAGCTTAG TTAGACTGCT GGTCCAGTG CTTTGTTTTG  
CTGTACATA TACCTAATA TGCTTTTAA CATATGNCCA AATTCC

SEQ ID NO:791: (Length of Sequence = 317 Nucleotides)

AACAACTCCA ACCATAATGG AGAAGGAAAT GGCCAGAGTG GCCACTCTGC AGCGGGCCCT GGTTTTACGA GCAGAACTGA  
GCCTAGCAAA TCTCTGGAA GTCTGGCTA TAGTTACAAA GATAGTTTGG GGTGAGCGT GCCACGAAAT GTCAGTGGCT  
TTCTCAGTA TCCTACAGGG CAAGAAAAGG GAGATTTCAC TGCCATGGG GAACGAAAGG GTAGAAATGT AAAATTCCCA  
AGCTTCTGC AGGAAGTGCT TCAGGNTAC CACCACCACC CTNACAAGN GATATTCTAG GGGTACTCA AGAGCAT

SEQ ID NO:792: (Length of Sequence = 258 Nucleotides)

GATCAATATA TCCAGGAAT TGTGAAAAGA TCCTAACTT TCAAACATG TCACAGGTAG TACTTGAAGT ATGCTTGGTA  
AAATGTACCG GTTAAAGCAG TATGTTTCTC AGATAGCCTG AGATTTTATT TAACAATTAT GTATCTAAGT CTAATAATC  
ATTGAGCAA AAGAGTGTG GTTNCATAAA TAAGANGTCA GTATTCTACT TAGATTATTT CAGAACTTG TAAGTNCCTG  
TAAATAGCTA CTCTGAAA

SEQ ID NO:793: (Length of Sequence = 282 Nucleotides)

GGAATGACAT GGTCACTCTN ACTTAAAAGA AACATTTTAG GTTCACACTT GCCAAGTTAG GAAGAAAACC AACCTTAGAT  
CCCTTCCCC CCACCAATAC TCCTTCCCC AAACACGTC CCCACCGNC TCTATGTTA ATTGAATTTT TATTTGTGAT  
ATATAGAAAA CCTAACCCAT GGCTGATAG CTGAGTGTCA TTTGGCTTCA AGCTGAAACC AGGGNACAGC TTGGCCTGGA  
ACCTTGAGAC AAGATGCTGG CCTCANAAGG TGGGGGCTCA CG

SEQ ID NO:794: (Length of Sequence = 330 Nucleotides)

GTGAGGCTG CAGGGAGCCA TGTTCACCCC ACTGCACTAC AGCCAGGGTG ACAACAAGAA CCTTCTGGG CGTGAACCCA  
GGGGGGGAG TTGAGTGAG CCAAGATGTT GCCACTGCAC TOCACCAGCC TGGGTGACAG AGCAAGACTC CGTCTCAAAA  
AAAAGTTTAC TACTGGGCTT TAATTATTTT GTTTCGGTTT TGGGTGAAAT NATTTTATTA CTGACTGGTT CCTTAGTTGT  
ACAGAAGCCT ATTATCTTTA GAGAGACTCT TCATGGTAAAT TAACTCAGAT TCTTATTTTG CCTGGGTGAA AGGANGGCAA  
GTGGATCTAA



SEQ ID NO:795: (Length of Sequence = 332 Nucleotides)

GGAAATAAAG GTGACATGAA CTAACATATC AATCATGAAT GGTAGAAAAA AATGAAAATG TAACGAGATG GGATCCGGGT  
 CAAAGTCAGG GGAGGTATAG TTGAAGATAT TGAAGGAGTC ATTATGATAC CAAAGAAAAT GGAAAGANGT GGTATCCAGA  
 TAGGTATATCC TTGGAGAGTA TCCAGGGATG TCTCTTTNCC TAAGACCTTA GAGAAGGAAA GGATGGCTGA TAATATAGGG  
 AAAAGTTGAC ATGGAAGGAT TAAATAATTT TTTNAGAAAT CACGTAAGGN ATGATAATCT GAATTTCCAG GGCTAGGCTC  
 AGAAGCAGAA AT

SEQ ID NO:796: (Length of Sequence = 305 Nucleotides)

CCCAGGGGA CAGCCTGANC TCCCTGCTCA TAGTAGTGGC CAAATAATTT GGTGGACTGT GCCAACGCTA CTCCTGGGTT  
 TAATACCCAT CTCTAGGCTT AAAGATGAGA GAACCTGGGA CTGTTGAGCA TGTTTAATAC TTTCTTGAT TTTTINCTTC  
 CTGTTTATGT GGGAGTTGA TTAAATGAC TGATAATGTG TATGAAAGCA CTGTAAACA TAAGAGAAAA ACCAATTAGT  
 GTATTGGCAA TCATGCAGTT AACATTGAA AGTGCAGTGT AAATTGTGAA GCATTATGTA AATCA

SEQ ID NO:797: (Length of Sequence = 337 Nucleotides)

GGCTGCATTA TGACAAGAAG TCAAGCTTCA TGACAGTTAG TATGGGCTGG AGTCTGCAAA GTCTGAAGTG TATTCTCATA  
 GAATGATTCC AGGTTTCAGG GTGTTCCACC TGCCAGAACC CAAAACCTACA ACTATGGGCG ACACAAGGGA AGTTTTAGAA  
 ATCTCCCTCT ACACGCATTT CTGGTTTCTT ATTATTCCTC CATGGCAGCT GACAGATCTG GAAGTGNAAA TAGGGGATTC  
 TCAAAATCAA AGCCANGAAG ACACCTTGTG TGACACCAAT GGAGTCTCAG AGGGTGGGAA TAGAAGTGAC TTNGNCCCAG  
 GCATTTGCTG GGAACCT

SEQ ID NO:798: (Length of Sequence = 341 Nucleotides)

GAACCTTGA AGGTCTAGGC TACAGTGAGC CATGTTTGCA CCAGTGACC CCAGCCTGGG TGACAGAGTG AGACACTGTC  
 TCAAAAAATA ATAGTGATAA TAATAATAGT CATTTATTTT AAGTCTACAT GCTGAGATGC CAGAACAGT AAAATTGGAT  
 TATAGATTCA AGCAGTATGT AGGTATCTT TCATAAAGTG AATAGTATG TAATTTTGA TGATTAAAA CAGNCTTTTA  
 GTAGGTGTTT AAAAACTGG NTAATTCCTT TCATGNCATT CAAACATTTA GGTGGCCTGT CTTTGTTTTT TTAGGNTATA  
 ACTTGCAAAC ATTCANTTGT T

SEQ ID NO:799: (Length of Sequence = 322 Nucleotides)

TTTTTGAGTA ATGAATTCAT TTAATATAAA CTTTAGTATA GCAGAACTACT ACAGGTTACC CACATTTAAC CCTAAAAACA  
 AACAAATGAC AGGCACCTCA GTGAATAAAC AAGCCCATGT TCAAAATATAA AATGCTAAAA GTGAGAAAGA AATTATGAAA  
 ATATATACCT TTAATTTGCA GACATATAAA CACTTTTGGT ACAGTACAGA TGCATGATGC CAAAAAGTAA AATGNTCCAG  
 TTTAAGCTAA CACATTCCTT GTTTATACAG NTTATTTTNC TATAGCTCTC ATATAANANA AATATTNCCA GCTCACACAA  
 TG

SEQ ID NO:800: (Length of Sequence = 405 Nucleotides)

ATCAAGAGTT GTGIGGTCTA CCGACTGAGC CTGCCAGATA ACCCTGTAGT ACAATTTTTN CAGCATAGTG GAAAAGAAAG  
 CCATGNTCT GGGCAGGTCA GGGTTTGANC GCTAGTGCNT TGTATTAAATG ATCATGATGA TAGCTAGTAG ACAGGGCTTA  
 CCAGATACTA GGTGCTCTCT TAACTGCTTT ACATATGTA GTTAACTCAT TTAATCTTCA TGACATCACC CCTGAGATAT  
 GGGTAATATT ATAATGCACA TTTTATAGGT GATGAGAGTG AAGCACTTGC ACAGATTACT CCAGCTTAGT TCATAGCAGA  
 GCTGGGACTT TTAAATCAAG GCACITAGATG GTTCCAGAGC TTTGTACTAC TCTTCTGGG TCTTTCACAG TCTGAGCTGG  
 TCCGG

SEQ ID NO:801: (Length of Sequence = 408 Nucleotides)

CTGGGTTCCTA TGTAGCGTCT TOCAGTINC TCIGTTATAA GATGGTTTGT TACATTGCTG CAGATATTTT TGCATGTCCT  
TTGAGTTTCT CAAGACCAGG GTTGTATTTT TOCATGTCCTG TOGATGAAAC AGTACATGAC AAAAGAAGGT ACTTAATACA  
TGTTTGATAA ATTAATTACT GTTTGGTAAA TTAATTATTG AAGGAAGACC CAGACTGGTT CTGATAAATC ATTGATTACA  
TTTACAAAT TTGGATAAT TAGGGGAGCC TTGAGAAGTT AGAGCTCTAG GGAAGGTTCC AGGGAACGTT TGAAGGATGT  
GAAATATGGT TTTCAAAAT CATAGTTTAT TGCAGGATTC TGGNATACTT TCCCAAGTGA GGGGNAAGAT GAGGAAGANG  
ATGGGCTT

SEQ ID NO:802: (Length of Sequence = 343 Nucleotides)

ATGAGACTTA CTCCTATCA TAAGAATAGC TTGGGAAAGA CCCACCCCA TGATTCACTT GGTCCACC CACAACACAT  
CAGAATTATG GGAGCTACAA TTTAAGATGA GATTGGCTG TGGACACAGC CAGACCATAT TAGACTCATA ATTTGCTTC  
TGCACAGTAA GANCTGGGCT GGGATACCTC ATAGATCATA AACAAATCCG CACCCATGAA AAGATTAGA GAGTCACACA  
GGAAAGTCAA CAGAAGNCAG AGAGATGTGG GTCCTGGNCT TGCATGTCAT TAAGTGGTGG GNTCCTTCAG CTTTCACATN  
TTCAGGCAGT GGGGTCAAGA AAC

SEQ ID NO:803: (Length of Sequence = 182 Nucleotides)

GAATGGCCTT NCTAACGGC ATGTATGACT TGCATGANT CTCTAAGCT GAACTGGCT CACCTCANCC TGCTTGCTG  
GCAAATGCGG CCTTCAGTGG GAAAGTAAAT GGCAGCTGCT GINATTACCT GGTCGNTGAA GAAAGACAGA TGGCAAAAT  
NATGCTGTT GGGGATGACA GC

SEQ ID NO:804: (Length of Sequence = 312 Nucleotides)

TTTATTTACT GCGTTGTAA ATNATCACAA AACATATTCA TTGTCAAGTG AATGCACAGG CTTTCAAAGG TGATTGTATT  
CTGCAAGGTG GGAATAGCC AACTACCTTC TAAGGTGAAT GTCAGCCTG CCATTTOCAA CCCAAAACCT CCTCTAGATT  
CTCAACAGGG CAGCTTCTGC TTCTAGCCTC TTTGGGAAA GGTGAGCCT GTGTAGAAGG CTTAATACCA ACATGCAGAT  
CCACCTGAGA ATCACTGGAA TGCTCTGGAC CCAGCTGGAA TGCTTCOGGA ACCCAGTCAG GCTTNOGGAA AT

SEQ ID NO:805: (Length of Sequence = 411 Nucleotides)

CATGCAAAAT TCAGAAATATA AAAAANTGCA GGGCCTGGTT GCGCACATAC ATTCTCAGG TTAAGGTGGA TTTAAAGATG  
CCCAACAGAA CCAATGAAT CAGAAGCTAA AAGGACACT TCAGTGATCA GCAGAGCAT TCTCTACGT AACAAATGGA  
GGGAAAGTGA GCACACATTA ACTAGOGAAG TCACAAGGCT AGATTAGGGG TGTACAGAAA TCTAATTCCT GTTGCTATTT  
GCAACTACAT ATATTTAAAA TACANGGAGA TAAATACCA GAACACATTA AGCCTACTGA TTTAAACAGA NCATTTCAAG  
ACTGCTACAC AGAAAGGGAA GGAAGCTGT TAACCCAGCA CAGCAGACA CCTCACATAT TTCCGCTCA GAGGTAAAT  
GGGAAGGAAG G

SEQ ID NO:806: (Length of Sequence = 287 Nucleotides)

GCATTINAGT GCTGATACAG ATACAGTGAG TTCTGCOCT TTCTCTCT NTATATTGAA GGGATTATAA ATGAAGCTCT  
TTAAACATTC TGAGATCINT AAGTTGATTT CTACATGAAC TCCAAGTGGT GTTAATGACA TTTTCAGAAA AGATGCTTTA  
CTTAGCTGAC AAGAAAAGT ACTCTGTAG CCTTTATTTG TATGTGATTA AACAGAGTTG ATAAAATAAT CTAATATTAA  
CTTATCAATG CAGTCTTACA GAATCCACCT ANTIACAAAG TAGATAA

SEQ ID NO:807: (Length of Sequence = 369 Nucleotides)

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GGCAGATATA ACCTTTTCTC AAACATCTCT AATTGTCTGC ATACCCCACT AATATTGGCT ACATAATACA TTTATTTTIG  
TCATTTGGGA CTAAGTGCCT TACTTAGTTT TGINCAGTGT ATTCAATTAAT TGAAGAAATA CTTATTCAGG ATTTCTATTA  
CTTAGTTTIG CTCAATATAT TCACTAATTG AAGAAATATT TATNCAGGAC TTCCATTATA TGAGCACTGG CCTTTGTGGT  
ACAAAGATAC AACATGAATC TGAAACTCAA TTTAATCTAG AAAGATTAT TAATATAANC TCATCAGAAA AGCAAGNCAT  
CTACTGTGAT AGCTACAGTA TTGGTTAGAA ATGGAAGAG AGAGCAGAT

SEQ ID NO:808: (Length of Sequence = 361 Nucleotides)

CAGGCTTGT ACCAGCCGCC ATACTCTCCA AAAGATGTCC CATCCMTTN CTTTCCTTG CATTCCTCTC TTTCTTCAGC  
ATGCATCCAG ATGGGTTTAT TTTTCATCCTC TACAGAACCA AACTCCCTTT CATGTGCACG AGTGAGAATC TCTTTGTACA  
GTGTTTCTGC TTGCTTGAAC TTTCCITGTT TCAAATAGCA GGATGCCAGG TTATTTTTCG TCTTAGCCAC GTTGGGGTCA  
TCAGGTCCA GTTTGTCTG GTAGATCTCG AGGGCTCTTT GATAATAATA TTCTACTTCT TCATACTTGC CCTGGGTTCT  
GGCACAGTAA AGGCCAAGTT ATTAACTGC TTGGCAACAT C

SEQ ID NO:809: (Length of Sequence = 353 Nucleotides)

CTAATTTATC TTCATGTCCA GTGAGCAGTG TTGCGTTTTT CCTTGTAGCA TTGGAAATG ATTTACTGGA ATTACAAAAC  
CTATTTTCCC TTAAATTTT AGCTTTGGCT CTGGCTGCTT TTTAGAATAA TGCAAGATAA AAATCACACC TGAGGGCTGA  
AAACGGAGAG GGAATGGGAG ACTTGATATT TAAGCAGCTT GAATGGTTTT CCNTTNCITT ATTTTAAAG AAATGCACCT  
GCCTATGATA CTGTCTCTCC AGTGAAATGA TTACTCTCC ATTACTCTAT TGATACANIA TTGTGCATGC TAGTGTGTGA  
TTTCTATACA GTAGCTTGAA AATTGATTAA CCT

SEQ ID NO:810: (Length of Sequence = 296 Nucleotides)

GAGGTCAATG CTTCCAGGC TCGAGTTGAT GCCCACAGGT GTATTGTACG AGCATTGAAA GATCCAAATG CATTTCTTTT  
TGACCACCTT CTTACTTTAA AACCAGTCAA GTTTTGGAA GCGAGCTTA TTCATGATCT TTAAACCAT TTTGTGAGIN  
CTAAATTGGC ATCATATGTC AAGTTTTATC AGAATAATAA AGACTTCATT GATTCACCTG GCCTGTTACA TGAACAGAAT  
ATGCAAAAA TGAGACTACT TACTTTNATG GGAATGGCA GTAGAAAATA AGGAAA

SEQ ID NO:811: (Length of Sequence = 493 Nucleotides)

CCAGGAGCTT CTCCTCTCTT GCCAGGGCTA TGAGCAGAAA CCTCAAATAA ACCCTGGGCA GAGAAAACCA ACTTAATGAA  
GAGGAGGTTG CTGTTTCCAC TGGCTTCTAA TTTTGCAGAT GCAATGAGCA CTTACGGCTT TTGCACTGGT TCAGGAAAAG  
GCAAGAAGAA GCAGATTGTC ATGTTCCAAA GCGCTCTGAT GGCTGCATGG AGCCAGCGGT GCTGTGACTT TTTTAAATAG  
CTTCAGTACC TTINATACGT ATGTCTTAT TTAATCTTTA TCTATGCTCT CTTCCTCCCA TCAGCCTGGG AGCTCCCTGG  
GGCAGGTCTG TTTCTCCCTT CCAGTCCGGA NTGSCAGGA GCTGTGCCTC CCCCATCACA CTGGAGGCT GTCTNAAGGC  
AGGGGCTGTG GTCTCTGCCA TTAGACTINGA AGCTCCCCAA GGTAAAGGT CATATCTCA AAAAAGCTTA GAATAGCTTA  
GGAACCTAGG GGT

SEQ ID NO:812: (Length of Sequence = 337 Nucleotides)

AAATTCACAT ACTTGTAAAT NATGCAAGCA AATCTCACA TAATATTTT TAAATGCTAG ATAGTTGGTA TAATNCAAT  
CATTTTAAAT ATGTTAAGAC TTGTTTGTGA CCTAACATG AGGTCTATNC TGAAGAATGT NCCATGTGCA CTTGAGAAGA  
ATGACTGGAG TGINCTTTAT ATGTATGINA GGTCCAATTA GCTTATAGAA TTGCNCTAGT CCTCTATTTC CTTATTCANC  
TTTTGTTGG TTGTTGINCT ATCCATTAT AAAAGTGGG TATTGAAGTC TCCTACTATT ATTGTGCTAT CATCTCAGC  
AAACTAACAC AGGANCA

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SEQ ID NO:813: (Length of Sequence = 310 Nucleotides)

AGGTGGCCTC AGNNCAGCCA AGCTGACCTT GGCACCTGGC TGGCTTCTNT AAGGCANTAG AGTGCCCA CAATAAGCNCA  
 CCACCTNTCC CCACCTOCTC CCTTCTCTCC CATGCCACCC CACTTGCTTC CAAGGGCTTG GTTCCAAAG TNACATCCAG  
 GGTGTAAGAG GTTGGGGAAA ACGTCTGCA AGNTGGCTCA GGGATCTNAT TCCATCAGAT GGTCTCATGA ATACTGTGGG  
 AGATTAAATC CATCTCAAAA TAGGCAACCA ATGCTATATT CTGAATNINA GGTCTCTGGA CTGAGTCCCA

SEQ ID NO:814: (Length of Sequence = 361 Nucleotides)

GATTTGAGCC ATCAGAATTC AGCTTTTGTA GATAAGAAT ATGAACAAAT TGACTATGGA TGGAAATTATT GTATATAGTC  
 AGCTTGCTGA ATTATTTGGT AAGCACTACT AACTATATCT TGGTAACTA TGGTGCACT GAGCCACCCC CTAAAGCAA  
 AAGACATTTA GCAATTCACC ATATTTTGCA ATTAAACAAA TGAGAGCCTA TGAGANTGAA ATGNTTTCAG GTGGAGTTTG  
 ACAATACAAT TCATCCNTAA TATATAGGNN NAAATATTTT CTCAAAAATA ACATCTATGT GGTAGGNCCT TAAAAACGAT  
 GGATGNAATG CATGCAAAAT TCTCTGGTAC ACAGACACAT G

SEQ ID NO:815: (Length of Sequence = 301 Nucleotides)

GAAATTNACT CTGTMTTCCC AGGCTGGAGT GCAATGGCAC GATCTTGGCT TACCGCAACC TCGCCTGCT GGGTCCAGC  
 GATTCTCCTG CCCCAGCCTC CTGAGTAGCT GGGACTACAG GCATGCGCCA CCACGGCCAG CCAATTTTTC CATTTTNAGT  
 ACAGACGGGG TTTCACCATG TTGGTCAGGC TGGCCTCGAA CTCCCGACT CAGAGGATCC GCCCACCTTG GCTTCCCAA  
 GTGCTGGGAC TACAGGTGTC AGCCACCACA ACCGGNTAA TTAATACTTC TTGAAATTTC A

SEQ ID NO:816: (Length of Sequence = 310 Nucleotides)

ATCTTTAACA TATTAAAATA GACATGAGAA AAATGTGTCA TTTGATAAAA TGGGGGAAAT GTAATAAATG ATTACCAGAA  
 ATATAAAAT AAGCCGTATA TGCNCTTAAG TAAATCGAAT CTAGGCATCC TTAATAATGTA AAAAAGGNTG CAACAAGAGT  
 AAGNGCCCA GAATGATGTA AATTACAGGA ATGGGGTGTA ATGTAACCTC TAGAGGAGGT GATGTTTAGA AGAAGCAAAG  
 NGAATGCAAT GANGAAGCAA ACTTGTTTTA GGCAAAINCT CCTGGGAGTG GGACCAGGCA GCCCCCTCTT

SEQ ID NO:817: (Length of Sequence = 225 Nucleotides)

TGGCATGCGC CTGTAGTCCC AGCTACTCAG GAGGCTGNGG CAGGAGAATN CCTTGAACCC AGGAGGCAGA GGTTCAGTG  
 AGTCGAGATT GCACCACTGT ACTGGTCTCA GCTTAGGCAA CAGAGCGAGA TTCCATCTCA AAAAAAAAAA AAAGTTAAAA  
 NTATATGCT AACTATGATA CAACTGATA GCAATATTGT CTTTAGATTG AAAATAAAAA TAGGG

SEQ ID NO:818: (Length of Sequence = 225 Nucleotides)

TTAAAAAAC CTGTAGTTTC ATTACCTTTT TGAATAATGN CATACAAAA ATGTATTGN TTTTGTGTC TGTGAGAATT  
 GATGTTTGTA GATTATAAT CATTTTGTTT AGAATTACAA AATAGTTTTT AAATATTGTC TGAGAAAAGC CAAAGTTAAT  
 GCAACCNAGT GGAAACTGTA AGACNNTTG AGTATTGTTT GTTTTATGG ATGCATTGG ATTTT

SEQ ID NO:819: (Length of Sequence = 280 Nucleotides)

TTGACTAGCT TCCTACGTCA TTAAAAATC TTAAATAGT CTGTCTTAAT GGCTGCAAT TTTGTGTAA GTCTGGGCTA  
 AAATCTGATG AAATGTTTTA CCTGTGGTGA AGTAATTAG CAACTCGTAT CTTTTTAAAA TATTACAAT GGGNATTCTA  
 GTACGTACA AACATTGTA ATATCATTA TTTGTGCCA TTGTCTGTC TATGAAATAC AGTAGAATGA AAATTACTT  
 CAAAGCATTG ATTNTCTTCC CCCAGGNNAT GATGGCAAAA

SEQ ID NO:820: (Length of Sequence = 328 Nucleotides)

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CCAGTTAATT TTGTAAAGTT TATAGNGATG GTTTCAGTTA GACCTGTGCT GTCAATACAC TAGCAATTCA CATGCACATT  
 TAANTTTAAA TCTAAGTTTA AATTTAATTA AAGTTAATAT TAAATAAGAT TTGAAATGCA ATTCTCAGTC CTACAAGCCA  
 TGCTTCAAGT GCTTCATATC CATGTGAGGT TAGTGGCTGC TATACTGGT AGTGCAAAAA GAGAACATTA TTGTAATCAT  
 AGAAATTCTA TTGGTAAGTT TATGGGGTAG TACATGGACT AGAATGTAGT GAGGTAGTGA GCTGTGGATG CAGAGAAAGG  
 NCACTGGA

SEQ ID NO:821: (Length of Sequence = 310 Nucleotides)

TCAGCATTGT TTTCTGTATG TTTGAGATG ATTATTGGT TTTCTTTTTT ATTGTGTAA TTTGGTGAAT TGCATCANCT  
 TTAGTATCTT AAACCAACCT TGCCCTCTTA GGGTAAACCT TATGTGGTCA TAATATATAA NCCTTTAAAT ACATTATTGG  
 ATTNCTTTTT TTAATATATT GCTGAGGATT TTTCATGACT ATAATCATAA GAGATATTGG CATATGATTT CCTATACTTG  
 TAATGNCITT GTTAGAAGGA GTTTATATTA GGNTTTATNC TGGCCTCATA AAATGGGTTG AGAAATGTCC

SEQ ID NO:822: (Length of Sequence = 372 Nucleotides)

GCCAGATTGT NTTCCTTGG AGCCCTGAC CCGGCTACT CTTACCCAGA CACGGCCCGG CTTTGGCCCA CAACACAGCC  
 GTCCACCCCC TGGTTCCTTC ACCCTAGCAG TAGCAGTAGC TCTGGGTGGA GTTGCCAGAG GAGCTGACAG GCCCTCTGCC  
 ACTGCTGCCA CCCCAGGGC TAGGGAGGGA ACAAAGAGCC TGCTTGTCTG GCTTGCACAT CCAGCATGCC ACAGCTGCAC  
 TACGGNGAGG AGGTCAGACA GTCCCCCAA CAAGNCCCG ATCCCTCTNC TCCTCCACCAG GGAGGGCCCT GGGCTTTGGC  
 CCCACAGNAC AAAACGTTCC ANCCCGGCT GATCATCTG GGTGGCAGC GG

SEQ ID NO:823: (Length of Sequence = 288 Nucleotides)

AGCTGGCATC CTTGGGGAAA ACCAAGCAAC AGTCTCTCA CAGCCAAATT CACCACAGTA CTCCAATCCG NAACCAAGTG  
 CCGCATTTAC AGCCCATCAT GAGCCCTGGG CTNCTTTCTC CCCAGCTTAG TCCACAACIT GTAAGGCAAC AAATAGCCAT  
 GGCCCATCTG ATAAACCAAC AGATTGCCGT TAGCCGCTC CTGGCTCACC AGATCCTCA AGNCATCAAC CAGCAGTTCC  
 TGAACCATCC ACCCATCCCC AGNGCAGTTA AACCAGNGCC AACCAACT

SEQ ID NO:824: (Length of Sequence = 325 Nucleotides)

CTCCTGAGGT CAAAGCTGCA CGTGGGGAAG AGAAAGACAA GGAGACCAAG AATGCTGCCA ATGCTCTNC ATCCAAGTGC  
 GCCAAGACCG CCACTGCAGG ACCAGGAAT ACCAAGACGN CCAAGTCATC TGCTGTGCC CCAGGCCTCC CTGTGTATTT  
 GGACCTGTGC TACATTCTTA ACCACAGCAA TAGTAAGANT GTTGATGTGG AATTTTTCAA GAGAGTGGG TCTTCTACT  
 ACGTGGTGAG TGGGAATNAC CCTGCTGCTG AGGAGCCAN CCGGCTGTC CTGGGACGCT TTTTGTGAA AGGAAAAGGC  
 TCACT

SEQ ID NO:825: (Length of Sequence = 318 Nucleotides)

AATCAGCCCT ACAGCGATT CTCCACCCC ATTAGCAAAT ACGTAATAT ATGNTCTAG TAATCATCCT CTCACAATTC  
 TNCCTTTCTT AATTNNCCG TGAGTCAAGT TTCTTGACCA CAATGTTATG CTGAGGAAGA TCTAATGTTT TCCATGGAGC  
 AGAAATTGTT AGTCTCAAC TCCAAGGCT GCTTGTCAA GCCCTGTTN CCGTGTCTTC ATAAACCTTG TCAGGCATTT  
 ATTTATTGAG CACATATCTA CTGNTCTG CACAAGAAT CATAAGGTC TGATGAATTA TGTCCCTCT GAGTGGGA

SEQ ID NO:826: (Length of Sequence = 287 Nucleotides)

TACAGACTCA GGTATAGGG TGINATTTT TAAGTCAATA TTCAGTTTCA CAGCCAGAAT CTGTGAAGAG AGAACAAACC  
 ATGAGAAAAC TAACANTTTT ATGGTGATTG AGAGGTTCCA AGTNCCTGEN GTTTTAAAAA AATCAGTTT TAAAGATAAA

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CTAACTAAAA CTAGTCCAAG CACTGAGACA GAGTATTAAA AGATGGTAGC ACACCCAAAG NGCACGGTGG GTCTTGAATA  
GCTAACATGT TTCAAGTAGT GGAGGAGAT GTGCTTAAAT AGTTACC

SEQ ID NO:827: (Length of Sequence = 426 Nucleotides)

TTTTTTTTGT TTGGGACAG AGTCTCACTC TGTCACCCAC GCTGGAGTGC AGTGGCGTGA TCTGGGCTCA CTGCAAGCNC  
TGCTCCCGG GTTCATGCCA CTCTCTGCC TCAGCTCCA GAGTAGCTGG GACTACAGGG GCCCGCCACC ACGCCCGGCT  
AATTTTTTTG TATTTTTAGT AGCGACAGGG TTTCACCGTG TCAGCCAGGA TGGTCTOGAT CTCTGACCT CATGATCCAC  
CTGCTCGGC CTCCCAAAGT GTTGGACTAC AGGCATGAGC CACCGCGCCC GGCCGGATGG TTAAACATT TTAATAATA  
ATATTTAGTG CTAAGACAGG ATATGGAGCA ACAGGAATC CTATATGCTT GCTGGTGGG AATGCAAAAT GGGTACAACC  
ACTTTTGGGA CAAACAGTTT TAGTAA

SEQ ID NO:828: (Length of Sequence = 402 Nucleotides)

GGCTGCTTGC TCCACTCAA CAGGTATCTG GGAGCCAGCA CTCTGGCAGT CCTCTAAGC TCTAACTCTG GTTTTACTGT  
TTINNAGTIG AAACCTTTGT CCTGGGAAT AGTCTGGCCC GCTCCTTGA ACCACACTCA GACTCAATGG ACTCTGCCTC  
AAATCCCACC AACCTTGTC GCACCTCCCA AAGGCACCGG CCCTTGCTTT CATCTGTGG CCTCCACCA AGCACTGCCT  
CAGCTGTGCG CAGGCTATGC TCCAGGGGTA AGCTTACCAG AGTCTGGCC CTNCTTCCT CCTCACTCT TTCTTCACT  
TCTTCTGA GCTCTGGGAG GCCAGAGAG ACCTAGCTCT GTTGCCCTCT GNCINGTGGT GGGGACTAGG GACTGGACTT  
AA

SEQ ID NO:829: (Length of Sequence = 417 Nucleotides)

ATCGGTTAGG AGTCGGCTTT ATGTGGGAAG AGAGAAAAAA ACTTGGTGAA ATGCTTCTG GACTAATTGA AGAAAAATGT  
AAACTACTTG AAAAATTTAG CCTTATTCCA AAAGAGTATG AAGGCTATGA AGTACAGTCA TCTTTAGAGG ATGCCAGCTT  
TGAGAAGCG GCANAGAAGC ACGAAGTTTG GAGGCAACCT GTGAAAAGCT GAACAGGTCC AATTCTGAAC TTGACGATGA  
AATCCTCTGT CTAGAAATAG AGTTAAANGA AGAGAAATCT AAACACTCTC AACAAGATGA ACTGATGGCA GATATTTCAA  
AAAGGATACA ATCTCTAGAA GATGAGTCCA AANTNCCCTC AAATCCACAA ATAAGCTTGA AGNCCAAAT CATCTNGCA  
AGGTTTCTC CCAATGG

SEQ ID NO:830: (Length of Sequence = 404 Nucleotides)

GGTTTGAGAG TAGAACAGGA AGTTGTGAGT AGAGCCTTGA AGGAAAGAGA ACAGCAGGTG CATGNTCCC CAGGCAGGAC  
TCAAGGTAGC CACTCAGGCA TCAGAAAGAG TCAGCGGCC ATGATGGCTC ACACCTGTAA TCCAGCACT TTGGGAGTCT  
GAGTOGGGTG GNTACCTGA GGTCAAGAGT TCGAGACCAG CCTGACCAAC AGGGTGAAT CCTTCTCTA CTAACTACA  
AAAATTAGCC AGGTGTGGTG GCACATGCCT GGGACAAATT TGGGATCAGT GTTCTCAGT CTGAACATAG TCTCTGTTA  
CCTGGGAGAG AGTGGTCAGG TACTTCCAGC TTCAGGCAG CCAAAGCAT TGACAAAACG ACAGGTAGGA TGGGGGAGT  
AAGT

SEQ ID NO:831: (Length of Sequence = 330 Nucleotides)

AATTTACAG GTTGTGCTT CTGAAATCTG TACCTCTTA CTCATAACAT TTAATGTAGC ATTCTCAAC CTGACCAATC  
TGCAGAAAT ATATGTCATA TATTAATTGT GTATACATGA ATATATGCAT TTTCTGGTA AAAAGTCATA GTTTTNCATA  
GATGTCATGT AATCTTTTAA GAGATTCTCA AATAGGAACA TGATTCCACC CCAATAATGG TGAAAAATGA TCAATTTAGA  
TGAAAGGGAC CTCAACAAGC CTCTGAGAT ATGAANCATA AAGAGNAAAT ATAAGCCGCA ACTTTTGGAC ATGACAGATT  
CATAATGGTT

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SEQ ID NO:832: (Length of Sequence = 402 Nucleotides)

CTGTTTCTC CTTTGTGTTT CCTATTTATN CTCCAGTGC TAACTTGATA TCINCTGTG TGTACACGTG TGTINIGTGTG  
 CAAATATATT TCTAGGAACA AGAGCAAACA TTCTAGTAAC TATCATTCTC TGATGTGGAG AACTTGGGCA GAGATCTGAG  
 TTACAGCTTT GTGGATTTAT TCTCTCTGAT GAGAGATCGC CCCTTAGAAT GTCATGGTCC TAACCCCGTC ATGGATACCA  
 GGGGTGAATG GCAGGGTCTT TCTCCTGCCC AGGAGGAAGG GTATGGGGAG CCGGTGCATC TTGACTGTCA GGTCACTGT  
 CTTACCACCT TTACAGCTAG GCTTTCTGAG GTGCCAGCGT CTCTGGGAA TTCAAACGTG AGTTTAGAGG CAAGCTGGGT  
 GA

SEQ ID NO:833: (Length of Sequence = 398 Nucleotides)

AGCCTTTTTC CAGAGATCAG ACCTCTTTAG ACATCTGAGA NTTCATACAG GAGAAAAACC TTATGANTGC AGTGAATGTG  
 GAAAAGGCTT CTCCAGAAC TCAGACCTCA GTATACATCA GAAACTCAT ACCGGAGAGA AACACTATGA ATGCAATGAA  
 TGTGGGAAGG CTTTCACAAG AAAATCAGCA CTCAGGATGC ATCAGAGAAT CCACACGGGA GAGAAACCTT ATGTATGCNC  
 TGA CTGTGGG AAGGCTTCA TCCAGAAATC ACATTTCAAC ACACATCAGA GNNTCATAC TGGAGAAAAG CCGTATGANT  
 GCAGTGACTG TGGGGAAATC CTTTCACTAN GGNAGTCACA ANCTCCATG TGCATCAAAG GNTINACANC CGGGGAGG

SEQ ID NO:834: (Length of Sequence = 394 Nucleotides)

CTTTITGTG AGTCTGTAAA ATCATTTCOA GGTAAAATCT AGAGCTTAAT CCATATGTNG TGCCATCTTT TGCITTTCCA  
 CACCTCTNAT CCTAGGTAAG TNAGAGCTAA AGAGTATTIN CTGAGCTTCT ATTATGGGCC CAGCATATGT NATAAATTCCT  
 TTTACACATA GGAATCTGAG GCTTAGAGAA GTTTACTGAT TTACCTAATG GCACACCATA AGTNCCTGGG CTAAGATTTA  
 AACTCAGGTC TCTGACTTA ATTACAGATG TCAGCTCGAT GGTAAATCATA ATAATATTGT NGTTGTGTGT GTTGTGTGTTA  
 TATATCAACA ATAGTAGTAG CTAAGTCCAT TTCATGAAAC AGCTCATTGG ATAGTCCCAT NTGGATAATT CTGA

SEQ ID NO:835: (Length of Sequence = 422 Nucleotides)

GCTTCTGCCC TCTATAGATT TGACTATTCT GGACCTTTCA CATAAACGGA ATCATGTAAT ATATATAATA AGCAAAAGGT  
 AACACAACCC AAGCTGGCAA TTTGGTTGAT GAATGANTAA ACAAAATGTG CTGTATCCAT ACAGTGGAAA TATTGGTGCC  
 TACTACATGT GGATGGACCT TGGAAACATC ATGCTGAGTG AGAGAGAGCC TTGGTATTGT TTCATCTCCC CAGGAGATTG  
 CAAGGTGCAG CCAAGGTTGA GACCCACTGA CAAGCAATGG ATATGGTTGG GTGCAGATGA AATAAGGCAG CCAGGGGCAG  
 GAGGGATGTC TCATTGAAGA TGACTGTTT GTGGGATGCC TAGCAGGGGT GGGGGGATGA GGTATTGATA ACCAGCAACC  
 CCAATCTTCA ACACAGCGTG GA

SEQ ID NO:836: (Length of Sequence = 408 Nucleotides)

CTCAAAAGAG TTGGCATCTC AGAAGGGAAG TGTAAGTACG ACAATTGTCA TTGATGATGA AGAGGACATG GAAACAAATC  
 AAGGGCAAGA GAAAAATTCC TCCAATTTTA TTGAACGAAG ACCTCCTGAG ACTAAAAACA GAACCAATGA TGTGGATTTC  
 TCCACTTCCA GTTTTTCAAG AAGTAAGGTA AATGCAGGAA TGGGTAATAG TGGTATCACC ACAGAACCAG ACTCTGAAAT  
 TCAGATTGCT AATGTTACAA CTTTAGAAAC AGGTGTAAGC TCTGTGAATG ATGGCCAATT AGAAAATACT GACGGGCGAG  
 ATATGAACTT AATGATTACA CATGTAAACA TCACTGCAGA NTACCCACTT GGGAGGATTG TCTCTAACCG GGACTGCAGT  
 CCAAGTAA

SEQ ID NO:837: (Length of Sequence = 347 Nucleotides)

TGGCTCTGTT GCCCAGGCTG GAGTGCAGTG GCACGATCTC AGCTCACTGC AACCTTGCC TCCTGGGTTC TAGCGATTTG  
 CCTGCTCAN TCTCTCAAGT AGCTGGGATT ACAGGCATGC ACCACCACTC CTGGCTAATT TTTGTATTTT NAGTAGAGGC  
 GGGGTTTTC CATCTTGCTT AAGCTGGTCT GGAATCTG GCAATGAAGT ATCCATCCAC CTTGGTCTTC CAAAGTGCTG

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GGATTACAGA CGTGAGCTAC TTCACCTGGC CTGTGTGGCT CTTTTTCAAA AAAAGTTTAC TNGACTCTTG CTTTATTGCA  
AGTCCCAGAA TGGATTGAT TTAGGGA

SEQ ID NO:838: (Length of Sequence = 275 Nucleotides)

AATTGCCAAG GAAAATTTTA TTTTAGCTTT GCATTAACAT ATTCTAAATA ATCCTTTCAC TTAATGCAAT CAGATTCTCG  
TGACAAGCCA AATACTTGTT TTTTGTGTG TGTTGTGTTT CCTTTCACCT TTCATTGTAT GCCCTTCAGA AAAATCTGAG  
AAGTGGGCTT CCATTTTGA AAAACAGGAC TTCTTAGTA CCATAGATAC GTAGATTGCA ATTTNCTTT TOCTGCAGCA  
TIACTGACCT TGTGAAATGA TGCCTATGGA TAGGG

SEQ ID NO:839: (Length of Sequence = 387 Nucleotides)

TTTTTGINTT GTGTGTAGAG ACTGGGTTTT NCCATGINTC CAGGCTGGTC TTGAACCTCT CGGCTTAAGC NATCCTCCTG  
CCTTGACTTC ACAAAGTGCT TGANTTACAG GTGTGAGCTA CCACGCCCTG CCATGTTTTT TGTGTGAAG GATCTGTTTA  
GTTTTATATC TTTCTGTGGC TCATATCTAA TTTAGTTGAC AGTACCTGTG GGTCACTAGG TAGACATTGC TAGCAGACGT  
TTAGAAATGA AATACTAGAG CTGGGAAAA AGTTGATATT TGAGATAGAG ACTTGAAGAA CATTAGCAGA GAGTTGGTAG  
TTAAGGTCTG TGAGCTGGTG AGCAATTCAA AATAAAGCA GAAGAGAAGA GGAAGACAAG GGTCAAC

SEQ ID NO:840: (Length of Sequence = 367 Nucleotides)

GTACTAAAGC CATGCAGGAA GGAGGAAATA ATCAGTGAGC CACGGGCTGA ACTTGTGGAA AAGAAATGGA GGGCAAGGTC  
ACAAACCAGT CCTTAAGTGC TTCTAATTTA ATGTAATCCT CACTGTTTGT CATTTATGCT TTINATGGCC ATGAAATCTG  
TTTTTCCCCA GINTCTAGT GTAATTGGA ATTAATTCC CAGCTGCTTT ATTTTTTTCC TAGAAGAGTC GGGGACATTT  
TCAGGATTAG TAGAGGTGTT TCTACAACAC CTTCATGCCT TCGATAGTGT GTAAGAGTTC ACCAATTGAN TTACCTTATT  
CTGTTCAGAA GTAGTAACTA TGGAGTTAA CCACTCTGGG ACATAAT

SEQ ID NO:841: (Length of Sequence = 346 Nucleotides)

TGGAAGGAA AAGCAAAAGA TTGAAGAATA AAAACATTTT GTATTTGCCA AAACCTGTNC TGTAGCAGTA AGTGTGAAC  
AAGTTTGCTA CATTTTCTTT TTGGTTTAA CTGGTTGGG GCTTTTTTGT TTGGTTGGTT TTAAGGATT TAGGGGATTG  
GCAAGTCAGT TTGTGAGATG TCAATGAACA GAAACCTAA GAAAAAGGT AGCAAAAGTN CTGCTGGCCC CAGATGGATT  
TINCTTAAG TAATTTCTTA ATCATTAGTT ACAGCTCTGT GTCAAAAGAT GTACATAGAA ATTTATGCTA GATTCTTAAC  
ATCTTTCCTT ACTGTGTGCA GAAATG

SEQ ID NO:842: (Length of Sequence = 326 Nucleotides)

GTTCCTTGAA ACAAACGAGA ACAAAGACAC AACATACCAG ANTCTCTGGG ACACATTCAA AGCAGTGTGT AGAGGGAAAT  
TTATAGCACT AAATGCCAC AAGAGAAAGC AGGAAAGATC TAAATTGAC ACCCTAACAT CGCAATTAAA AGANCTAGAG  
ANGCAAGAGC AAAGACATTC AAAAGCTAGC AGAAGGCAAG AAATAACTAA GATCAGAGCA GAACTGAAGG AGATAGAGAC  
ACAAAAAACC CTTCAAAAAA TCANTGATTC CAGGAGCTGG TTTTGAATAA GTTCAACAAA ACTGATAGNC CACTAGCAAG  
ACTAAT

SEQ ID NO:843: (Length of Sequence = 380 Nucleotides)

GGCCTTCAAA TTACAAAAAG CAATTTACAT TATAGTAATA GTTATGTTT ATAGTACAGG AACAGAATG AGTTAACTA  
AATATTCCAA ATCAGTACAA GINATINCT TTTTTTTTTT TTGAGACAGG GTCTCACTCT GTCACCCAGG CTGTCTTGCT  
TTGTATCCA GGCTGCAGTG CAGTGGAGTG GTCACAATC ACTGCAACTT CAGCTCTCTG GGCTCAAGCA AGCCTCCAC



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CTCAGTAGCC TCCACTCCT GATTAGCTGG GACTACAGTG AATGIGTCGC CATGCCCAGC CTAGTGGTAT TTTTAACAGA  
TAANTAAGAA TGGAGGTAGT GGCAGAGGTG GAGTGAGANG AGAGACANGT AAAATATAGG

SEQ ID NO:844: (Length of Sequence = 257 Nucleotides)

TTTCCCTCTC GTTGGCCAGG CTGGAGTGCA ATGGCGINAT CTTAGCTCAC CACAACCTCT GCCTCCAGG TTCAAGCAAT  
TCTCTGCCT CACCCTCCCG AGTAGCTGGG ATTACAGGCA TGINCCACCA CGCCTGGCTA ATTTTINTATT TAAGTAGAGA  
TGGGGTTTCT CCATGTGTGT CAGTCTGGTC TCAAACCTCT GACCTCAGGT GATCTGSCCA CCTCGGCCCTC CCAAAGTGCT  
GGGATTACAG GTGTGAG

SEQ ID NO:845: (Length of Sequence = 420 Nucleotides)

CTACACACAT CTTGCATTAC CTGGCAGTAA GCTTGGAGAG TAAGTTTTGC AGATGCAGAT CAGAAGAGAT TAGGAAGAGC  
TTTGAGATC ACCGCAAGTA TTTGTATTT ACTCTAAATT AAACAGAAAA CCCAGGAAGG GTTTTAGGCA GATAAATGGC  
ATTATTTAGT TTCTGTATTT AAGTCATCAT TTAGGTTACT GGGGGAGGCT GCCCTGAAGT GGATCAGAAG TAAAAGGCAG  
AGATACCAGC TAGGAAGCTG TTGCAGTGAG CCAGGTGAGA AGAGAGGGCC ACCTGGACCA GGTAGAAGCA GTACAGGTGA  
AAAAANTCAG ACACITCCAA ATCTTCTCA AGATTINATA CATTTATTGG CTGGGCACGG TGGGCTACA CCCGTAAATC  
CCAGCACTTT TGGGGAGGCC

SEQ ID NO:846: (Length of Sequence = 215 Nucleotides)

GNCTGGTGA CAGAGTGACC CTGTCTCAA AAAACAGTGA TTGTTGTAA GGAAATTATT AAAACCTTGG TTCAATATCC  
AATATCTTAA CTTTAAATTT TCAAATACTT CAAACTAGT AAGTATTACT ATGTCTAAAG CACAGTGCCAG TCCAACGGAN  
TATGTGAGCC ACATATATAA TTTTAACTAG GCCAGTAGTC ACATTAATAA GAAAA

SEQ ID NO:847: (Length of Sequence = 266 Nucleotides)

ACACGAAGAA TCTCTTCAT CGCCAAACAG CTTTCAGAGA TAGATGCTTT GTTTCCAATC GAGCATGCTA TTCCAGTGTA  
CTGNACATAC TGTTACCTC GTGTTAGGCA CCTTTATGAA GAGATNAAGN CACTGGCATT TCAGTGGGAT TTTAAGCATT  
TTTAATAGCT TCATGTACAG CATGCTGCTT GGIGNACAAT CATTAATTCT NOGATATTTT TGTAGCTTGA NTGTAACCGN  
TTTAAGAAAG GTTCTCAAAT GGTTTG

SEQ ID NO:848: (Length of Sequence = 275 Nucleotides)

CNCTCGGTC CCCTTTTAAA AATTACTTTT CAGCCGGGCA TGGTGGCTCA NGCCTTGTA TTCCAGCACT TTGGGAGGCT  
GAGGTGGAG GNTCACTGA GGNCGGAGA TTGAGATCAG CCTGACCAAC ATGAAGAAAC CCCGTCTCTA CTAAAAATAC  
AAAAATTAGC CGGGGCTGT GGCACATGNC TGTAATCCAG CTACTCGGGT GGCTGAAACA GAAACCACCA ACGNCTGACC  
TCAGGGAGAT GTCTAAGAGC TTCTGGCATG CCTCA

SEQ ID NO:849: (Length of Sequence = 318 Nucleotides)

GGAATTTTNC TAGTGAGGAG TGGAGGAAGG GGGCCTGGTG GAGGAGTAGC AGCCTTTNCA AAGGCCCTGA GGCAGGAATA  
CCTGGGAAGT GGGGGCTGTC TTGINTAAGA TGAGGCTAAA GAGGAAGGCG AGGCTTTACT TAGGAGGAAT GGGGAAGCCAC  
TGAGTGTTAA AATTAAAAGC AGTNGGGCT GGGCACAGTG GCTTACACCT ATAATCCAG TACTTTGGGA GGCCAAGGTG  
GNTGNTCAC CTGAGGTCAA NGAGTTTINAG ACCAGCCTNG CCCAACATTG GGCTCTACTA AAAGTACAAA AATTAGCT

SEQ ID NO:850: (Length of Sequence = 320 Nucleotides)

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ATGTCGCOCA ACTCAGGAGC AGGGCAGGAA TCAAACITTT TGGAGITGCT ATCAAGINCT TGATTTTINCA ATCCCAACCG  
 TCOGCAGAAC ACTAGATGTG TGNATGIVIG CTTGIGTGTG CATTGTAGT AAAGAGGGGG TTGAGAAGTG GAAGGCAGAG  
 NCAGGAGTNG GCATCTACCA NGGCATACAT NAAAGACCCT TACACCAACA CTGCCCTTCC CAGNAATGTG AGTGTATCT  
 GGTTCCTAA AACCTGGGC TGCAGTCCAG ATAGTCATGG TTAGANCAGA TGGTTGAGGA AAGGTTCAAG GCAGTAGGAT

SEQ ID NO:851: (Length of Sequence = 170 Nucleotides)

CATCCAAGAT ACCAAGATAT ATGAGGGAAC ATTNNITTA ATAAAAACA CAAAACCACA AATCCAAGAG GCTCAGNTAA  
 CCCCAGTAA AATATATACT AAAATACAAG NAAAAGGGAA AAAATGCATG NACACACACA TATAGGCATA TCATATTCAA  
 ACAGTGTGTA

SEQ ID NO:852: (Length of Sequence = 256 Nucleotides)

CAAAGTACAC ANGTTGATTT ATTACITTT GCAAGCACTC TGTCTACAT TTCAAAAACG CCACCNICAA GCTGTTGGCA  
 CATTATGTA CAAAACAGAT TAATTGTAAT GCTGCTACA AAGCACTCTG TGAAAATACA AACTCTAATA CCAGAAATAA  
 AAGCCAAAG TGTCAACATC ATTACATAAG TNGAAAAGTC AGTTTNGAA ATTATCACAA ACTGTTATGN CACGGAACCTG  
 AAATACTATA ATATAG

SEQ ID NO:853: (Length of Sequence = 281 Nucleotides)

GTATGTINGIT TCTCTCTCT TGTGCTTCT AGGATATTIN ATCCTTGACT TTAGGGAGTT TGATTATNAA ATGCCTTGAG  
 GTGATATTT TNGGGTTAA TCGGCTTGN GTTCTCTAAC ATTCTTATAC TTAGATATTG ATATCTCCTT CTAGGTTTGG  
 GAAGATCTCC GTTGTCTTTC TTTGAATAA GCITTCCTACC CCATCTCTTT CTTTATCTCC TCTTTACAGC AAATAAAGTT  
 TTAGANTTGC CATTINAGG CTATTTCTA GACCCTGTAG G

SEQ ID NO:854: (Length of Sequence = 255 Nucleotides)

TCTGTCCAGG ATTATTACCA GCTAAACCAN GTAATGGAGG TCTATGCCTG ATGAAGAACA CCTGTAAAAG CTGGAAAATG  
 TGGCTGTCTT CTCAAATGGG CAGATACCAG CACAANGATA CAAGGATTGT AAAGACTCAG AATCATGTTA CITCCAGAAG  
 AAACIANATA AGNTOCAACA ATGAACACAA NATAATANAA CTNAAGGANA TTTGGANAAC ANTGCATAAA CAAAACAAGT  
 TTAATGAATG ATTAG

SEQ ID NO:855: (Length of Sequence = 333 Nucleotides)

ATAGCTGTGG TGGTAACCCA CCAGAGTGAG CATGCTINCT TCINAGGATA GACGTTGGGT AGTGGGATTG GGGAGAGGCA  
 GGACAGAGGC TTCOGTGTG TCTCTCTAAT TCATTGTTTC TTAAAAAGGA TTGGGGCTTA CAAGTTTCAA ATACTAAGAT  
 TINATAAAGT CACATGGATT TTAAAAATC ACTCTATTGT AITGTTGAAA CATTCCATAA TTAAATAAAA AGGATTGGTA  
 TTATATATGT NCTTGAGTTG CTATAATGTT TTACGGTTTT CCTTGTCTC ACTTTTGAAT TNINCGAGGA TCTCCTGGGG  
 GAAGNTTCAG TCG

SEQ ID NO:856: (Length of Sequence = 230 Nucleotides)

TTINAGACAA AGTCTTGCTC TGTACCCAG GCTGGAGTGC AGTGGCGCAA TCTCGACTCA CTGCAACCTC CACCTNCTGG  
 GTTCAAGCNA TTCTCTGCC TCANCCACCC AAGTAGCTGG GACTACAGGC ACGTGGCACC ATGCCTGACT AATTTTTTGT  
 ATTTTTTTTA GTAAAGACGG GGTTCACCG TGTAGCCAG GATGGTCTCG ATCTCCTGAC CTCATGATCT

SEQ ID NO:857: (Length of Sequence = 334 Nucleotides)

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AAAAACAATT AGTAAAAATT ATGCATTAAAG GAATTATTTA CTAGACTTTC TGAAGTAAA AAATAAGTCA GCTGGTTTTT  
 CCTTTGANTT CCTATATATT AAGGCAGAAT TCTCTACT GTCCACCAA ATCATAGTTA CAACTGTTA CTTGAAATGA  
 TTTATATACT GCATTGACCT GGCATGTTAA TATTINCCTA TAAATATCAC CACTTATCCC CATGCCCTAA AGCAGTTTTT  
 TTAAACCCAT TCTTCTTGG AGAATAATTA TAATACCTTA AATACAGAAC TTGGGTTTC TGATCTGCC ATAGCCATGT  
 AGCACAGCCA CTGA

SEQ ID NO:858: (Length of Sequence = 301 Nucleotides)

GGAGAAACGC CTAATGTAGA TGATGGGTG ATGGGTGCAG CAAACCACCA TGGCAGTGT ATACCTATGT AACAAACCTG  
 CACGCTCTGC ACATGTATCC CAGAACTTAA AGCATAATAA TAAAAAANTA AGAAAATGGA AATTGATTTT AAAAATTTTT  
 ACAATGTGCA TCAAAAGACA ACATTAAGAA AATTAACAGA NTGGAAGAAA ACATTTGCAA ATAATTTATC TGATGAGGT  
 TTAATATCCA GAAAATATAA AGANCTCCTA CANCTCAACA GCAANAAAAG ACAACCCNAC T

SEQ ID NO:859: (Length of Sequence = 332 Nucleotides)

TGCTCTACC CATAGAGCTA TCAGAGGGTG CCTGCNATTG GCAGACCCCTT TACATTTCCC TTATAAAT CACTTCCCTG  
 CCAAGATCTC TGTCAAGGTT TGAGAAGTCA GAGCATTAG TTATTINCAA TAAATGGTAT GTACATGANC ATCAGCAAGC  
 TCCAAGAAAT GACTCGAGGG CCTTINACTA CTCAGAGAAT AAAGCAAAA TGCCAGGTTT TCAGTGCTTG TCCTTTGTGC  
 CAGGGATTG GACGTGTTTT TTGTTAAGTN CCAGCGTTGA GCTATGTTCC AGAAGATGGA GCCTCCAGA AATTAATTGT  
 AGTGCTTGAA GG

SEQ ID NO:860: (Length of Sequence = 233 Nucleotides)

AAACNTATG TGATTTTAGC ATTACAACAG TAATTCAGAA ATATCTCANN TGTTACATTG ATGTCATCAN TATTACAAA  
 AAGGAAAAA AAGTGACAGG CAACAGTGAA GAGCACCAGA GACCCAGCGC ACACCTAAAG TAGACCATGC TTCTTCTCT  
 CCACTGCCAG GTTATCGTCC CGGAAGCCC CCCACCCCT CGCTTCCTC CTCGCTTTC CTTAAAAA NNG

SEQ ID NO:861: (Length of Sequence = 327 Nucleotides)

GGGCAAGTGT CAGCGCCCGT TTCACGCCA CGTCGCGGAC ATGGTGATTT CAGAAAGTAT GGATATATCTC TTCAGAATAA  
 GAGGAGGCCT TGATTTGGCT TTTCAGCTAG CTACTCCTAA TGAAATTTIN CTCAAGAAGG CACTGAAACA TGTNTTGAGT  
 GACCTGTCAA CTAAGCTGTC TTCAAACGCC CTGTGTGTTCA GAATTINCCA CAGTTCAGTG TATATATGGC CTAGCAGTGA  
 CATAACACC ATTCTGGAG AACTGACTGA TGCTTCTGCT TGTAAGAACA TACTGCGCTT TATTCAATTT GAGCCAGAAG  
 AAGATAT

SEQ ID NO:862: (Length of Sequence = 378 Nucleotides)

AATCAGGTCC ACATTGTGT CTGGATGCT GAGTTTGCTG AGGGTTTCCA AGACCACTCT CTGCGGGGAA AGGACGGCAT  
 TGGGGCCAG GGTGAAAAG GGTCTCTGGG CTTCANCTGA AGGGCAAACCT GOCAGTGTA GGAGTCCGTC CAGGACAGGC  
 AGGCAAATNC TCTGGGGTA TGGAGATAGG TCCAACCTGCC CCGAGATGTT GCGAGTGTA ACCAAGGTGT TTTCCCGAG  
 CATCTCCAAG CAGTCCCACC ACCACTCCAC TTTTGTGCG CTCACCCCTT GGGTCTGTT CTNCTCCTT TTCATAAGTT  
 AGTGGTGCCT GCTTTCGGT TCTGGGTGCT TTGTGGGTGC AGCAAGGATC AAGCTTTG

SEQ ID NO:863: (Length of Sequence = 374 Nucleotides)

TCAAATTAAT GTTTTTATTT CCATCTGTAA CACTAGCAGA GGAGTCCAAA GCAGACTGAT ATCATGGAT ATAGTTTAAA  
 TGTAACAAAG AAAGAGTTGA ACTATGTACA TTGAAAAAG GAAAGACATT TTNCATACC AACCTTTCCC TAGTTGCGAG  
 TTCTGAATA GTAGAAACAA AACACATTTT TAAATCTTTC TATCAATTTA ATTAGGAGG AAGTAACACA ACTTTTAAAA

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TTAACCACTG AAGINGTCTT TAAGGACAAA ACTTAAATTT TAAATGGGT GTTACCATAT TTATGAGTG GACTGACTCC  
AAGGTTGCCT TGCTCCAAGN NTGGGCATCG TGACATTGCC GTGATGCCCA GAGG

SEQ ID NO:864: (Length of Sequence = 223 Nucleotides)

AAGGGGATAG AGCAGACACT CCGCAGGTINT CTTGAGATTA TCATCCGCTG AGGGTAGAGC TGAGGGTGGA AGGGGAGTNA  
GCAGACACTC GGAAGGTGTC TINAGGCTCA GGGAGTTATC AATTATAGAA TGTGTGTGAG TTGGAGGAGG TGGCTGGTGG  
CCCATCCTGT TTTTAAAGT TTCANCTGTG AGGTAGGGCC AGTAGGGCAA TCCTGAAGAA TGG

SEQ ID NO:865: (Length of Sequence = 228 Nucleotides)

GAACCGGGA GGCAGAGGTT GCAGTGAGCA GAGATCACAC CACTGCACTC CAGCCTGGGC AACANAGCAA GACTCCGTCT  
CANAATTTIN CCAAAATCTG ACGGAAAGAA AAGAAACAAA TGGTTCAGAT GGGACGGAGG GTGGGGGAGG GGGGGAGGGT  
GAGTAGGAAC CAGGAGGGCT GCCTGGGGTG GGGGAATAAN TTAAAAAAG GAACGAGTTA ACAACAGC

SEQ ID NO:866: (Length of Sequence = 328 Nucleotides)

GCACCACGTC AGAGAGGCCC CAGGCCACTG AGCCCGGGAG GAGACCCAGC CGGCCAGCCA GATGTGTGCC TGANTGCCAC  
AGACTTCAAG CAGTTTACAA ACGAACTCA CTGTATAAAG CTGTAAATC TCATTAAAC AGTAGACGAG TGCTTTAGAT  
TCTCTGAATA TCAATAATA TATACAGATA GACACTGAGA CATGACAGTC TAATCTAAG CATCTTACA GATGCATTIN  
CTTGAAAAGT TAGTCTTCTT TTTAACTCTG AATCAGTGAT AAAATTGTTA ATTTGCAAAA GAGTACAGTT TTAAGCAAGA  
NTAGAGTG

SEQ ID NO:867: (Length of Sequence = 361 Nucleotides)

GTTTCATGGC ATGTAATAAT TATGTGAAT TCAAATTTTA GTGTCCCCAG TTCTACTGGA ACGCAGCCCC TATGTGGTTC  
ATGINTTGCC TCCAGCTCCT TTCACACTGC AGCAAAGCAG GGAGTGTAAC GTACACCCCA CGGCCACGGG GCCTAAATA  
TTTCCATCA GACCCCTAGA GAAAAATATG CCGACCTCGG ATGTGACTGA GGGTGGGGAC TTGGGTGAAT GCGGCCCAGG  
AGTGACATCA AGGGTTTGAA GCAGACCTC TGTCAGGAG GGAGCGGAG CAGAGCAGGG ACAGTAGTNA GGAGGCCATC  
TGTGGTGAAT TAGGCAAGGT GAGGAGGATG TAGGAGGCAA G

SEQ ID NO:868: (Length of Sequence = 364 Nucleotides)

AAAGCAGCCT TCAGGCTACT CTCTCTTGEN TCCTTGCTCT GGGGAAGAAC ACTCAAGCAG CTTTAGAAAA AGTCCACGTG  
GCAAGGAATT GTGGTCTTTT GCCAACAGCC ATGTGAGTNA TCCATCTTAA GAGTGENTCC TCCAGCCCCA GTAAAGTGT  
CAATGACAG CAGCCCTGGC TAACATATTG ACTGCAACTT CATCAGGGAA CTTGAGCCAG AAAAATCTAG CTAACCTGCT  
CCTAAACTTC TGACCCACAG AAATGGTGAG ATAATGAATG CTTGTTTTAA GCTGCTAAGN TCTGGAATAA TTTGTTATTC  
AGCAGTAGNA TAACTAATAC AANGCCACC AAGNATCAIT TCCC

SEQ ID NO:869: (Length of Sequence = 383 Nucleotides)

AGCGACAGAC AAGTGAGCAT CACTACCAGA GCTCTGCCIC CTGTCAGATC AGTAGCGACT TTAGATTGTC ATAGGACCAT  
GAACCTGTG CATGCGAGGG ATGTGGGTG CACACTCCTT ATGAGAATCT AATGCTGAT GATCTGAGGT GGAACAGTTT  
CATCTGAAG CCATCCCTGT GCCCCTACCT GTGGAAAAAT TGTATTCCAT GAAACAGTT TTTGGGGCCA AAAAGATTGA  
GGACCGCTGC TCTATAAGAA ACTATTACTG AAATAAGTAA TAAAGTCTTT ATCTTACTTA TATTTATATC CTCTATGGTG  
TCCACACACA AGGTGCTTTT TACACTTAAG TTGTAAACT AAAATATTNC TTTAACTTT AAT

SEQ ID NO:870: (Length of Sequence = 409 Nucleotides)

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CAGCTTTGCA AATCAAATAG AATTCATTTT GCCTCCNCTN ATCTTACAAC TATTCTCTGG AGTAGGCAGG CTGGTTGAAC  
 TTCAAGAGAA GAGGCGTTCC TGAGAGCCTC CTGTGGTGAGC TTGCACACCT GGGGGCCAGA TGTTCTTTGC CCTCCTTGCA  
 AAGCCTCTCT AGTCTGGTGC CCAGAGAATA CAGCTTCAGC AGCAGCTCAC TTGTCTTTTN AGTTTAGATG AGAAAAACA  
 GCAAAATAGT CCATCAAGGA CAAATTCTTG CCAATGGATT TNCTTTTGCA AGGANGTTCA CCTTTGNCC TCAAGCATCA  
 TCTTTAAGTT GTGAATGCCT GATGGGAGGT CCAGGTTGNN CTGTGGGAGG AGCTNGGGT GGNITCCAAA ACCACCTGGG  
 GACCACTGG

SEQ ID NO:871: (Length of Sequence = 290 Nucleotides)

TCTTTGCATT GATAGATTAG TTATTTATGC CAGTNGTCTC TGTCGGCTT GTTTTGGTTT TNATTGCATT TGTTCCTAG  
 AGATTGTTT TAGTTTINCA ATTCTTTCT CTGTACACCT GCGCTCCCC CACCCACCA CTGGGTTACT ACCTCCTTTT  
 TGGCACTACA TGATGCCTTA AGCCAGGNT TGCCTAAGCT TTCATAACAG ATCCCAGCAC TGCTCATCC CAGTGGTGA  
 GGTNCTAAAT GGGATAACCT GATAGTGTGG GAAGGCTGGC TGGGGTGT

SEQ ID NO:872: (Length of Sequence = 313 Nucleotides)

AAAACAAAC AAATTTAAAA GCACTCAAAA ATAACCTCAA AAAGAGACTA GTGAGTGTCC CTTAAGGAAA GCGCTTCTG  
 CAGATTCCCA CAGAACTCGG CCCAGGCACT TAACCTCCAT CTCAGCTCTG GTACAGCTCA CTGCGTACAG TGTGTACCA  
 ACTCTTATGC CTGGNCTGCT GATAAATTCT ATTTATCTCT GAACCTCAAT TTATTCAAAT CTAGTTATGA TATATCATAG  
 TGCTTGTAAT TGTGTAAAA TATAGANGTA ACATACAGCA TGTGTCTACA GNTTAATAA ACTGGTCTA ATT

SEQ ID NO:873: (Length of Sequence = 300 Nucleotides)

TAGTAAACAA GTATTACTTC AACTGATACA ATGGCTACAT GACATCAAAG TACTATAAAT NATCAAACT ATGTACAGA  
 AAAATTACAA ATTGTTGCA AAATACATTA TACTGCTACC ATTAAGAAAA AAGTGCCTTT NGTTTTCTT TCTTCTTTT  
 TTTTTTTTT TTTTGCCAGA AAGTATTCT TNCATATAG AAAATCCTAC ATGTTACCT GCATGTGGCT AGGTATATC  
 ATAACGAGT TTGTACTGAG TCTTCTGAT TTGCTGGATG AAGGCTGAA AAATATATTA

SEQ ID NO:874: (Length of Sequence = 364 Nucleotides)

GAGTCATTGA TGCTGAGAGA TTGTAAGAA TATACTGACA GCATCCTTGT AGCTGCATCA CAGTAAATCG GACTTCTGAA  
 TCAAGCAGCC CAGCTAGCA GCTGATAAGA GTGAATGTAG GTGAGAAGCA TTACCTTATT CCGTAACAA GAGAAGTGT  
 TTGTGATAAG TGAAACTAGG AATGTAGAAG AAGAAATATC CTATGGCTAT TATAAAGAN GAAGGACTTG CCGANTGAC  
 TTGGTGGTGC ACCAGAAAAT AACTTTCAGA AGAATGCTTT CTGTTAAGCT GCTGCATTGT TCTGGAGGA AATGTTATT  
 CTAATGCATG TTATTTCTTC AAAAGATAGG ATACAAAGA ATTG

SEQ ID NO:875: (Length of Sequence = 341 Nucleotides)

ATCAGTCCAA TGCAGATTAG TATCACTTTG CTCATAAAG AGAGTATAAA GGTCTTGAA GTTTTGAAA GGAGCGGCTN  
 AGCTGACTGT TAAGGAAGCT ATCTTTTGT TACAAGAAAT TTACTTTTT CCGTCTAAA TTCAACAAAC AGAATATTAT  
 TAGAGACAAC AGAATACATT TACAAAAATG GCATCAGAAA TAATTGANTA CATTGTGTAC AATATCTNCT ATTAATGAAA  
 TAAATGATA TTATATATGA TATTGGTCT TTATGGGAAA ANTAATATAA TTNCAATAT TCTAAGGNTG ANCAAGNNG  
 GTTTACAAAT AGCATGCAAG G

SEQ ID NO:876: (Length of Sequence = 327 Nucleotides)

GTTTCANCTT GTGGGTCAAC TTCTAATATT TGATGGTGGC TACACTGTGA CAAGAAAGGT TTTTNGCTT GTTGGGGTCA  
 GTGGATGGGC ACAAGGGCAC CCAGTGGTGG TGCCCGNCC AGGGAGGAGA ATACATTGTA GAATATAAGG TTTGGAAGTC  
 AAATTATAGT AGAATGTGTA TCTAAATAGT GACTGCTTGG CATTTCATT CAAACCTGAC AAGTATATCT CTAAGAGCUG

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CCAGATTTC ATGTGTGCAG TATTATAAGT TATCATGGAA CTATATGGTG GACGCAGACC TTGAGAACAA CCTAAATTAT  
GGGGAGA

SEQ ID NO:877: (Length of Sequence = 404 Nucleotides)

ATTTGGCTCC TGAATGTTC AGAAACTGG TTTGTACAC TGGGAAGGA GAGAGTGAAG ACCCTCCAGT TGGTTCCTCA  
GTCAGCTCCG TTCTGGTGT CGCTTCTTG CAAATTTTTT CTCCCCTGG CCTTCCTGT GAGGGTTAAA AGGGCCATCT  
CCAAGCCAGG TGGAGCCCCA ATCCCATGA CCAAGAGGCG AAGGTATGGG GTCACCTTCT CATGGAAGCC CTCTTCCTAA  
AGGAGCCCAA AGGGGACACC TGCAGAGGCG GGGCTGTGAT CTGTGTGTA ACTTCAACAA AATCTCAGGT TAGTATTCT  
CCAATTCAG TTGAACCAG ATGTGGTATA CACTACAAA TGCAGATTCT GGTGCCCCC TCCAAGAGTC GGCTCAGTT  
AAAA

SEQ ID NO:878: (Length of Sequence = 340 Nucleotides)

TGTACCGCTG TGCTGTGGC ACGAACCTT TCAGGGACTG GAGCTGCTT TATCCTTGA AGAGTATTCC CAGTTGAAGC  
TGAAAGTAC AGCAGAGTGC AGCTTTGGT CATATTAGT CATCTCAGGA GAACCTCAGA AGAGCTTGAG TAGGCCAAAT  
NTTGAAGTTA AGTTTTCOA TAATGTGACT TCTTAAAGT TTTATTAAAG GGGAGGGGCA AATATGTGCA ATTAGTTGGC  
AGTGGCCTGT TACGGTTGGG ATTTGGTGGG TGGGTTTAGG TAATGTGTTA GTTTATGNT NGCAGATAAA CTCATGCCAG  
AGAACTTTAA AGTCTTAGGA

SEQ ID NO:879: (Length of Sequence = 372 Nucleotides)

GAAAGATAA TGAAGGAATA ATGCAAGCT GAAGGCTGTG CCAGATGTAA GAAGTGATTA TGAAGGATAA AAGAAAAGGG  
CTTCCAAGC AGGGAAGAGG CATCAGAGAG AAAACCAATT GTGAGCCAG TATCTGTCA CAGGGACATT TGTCTTNTC  
CTTTAATGCC CAGTAAGGGT CTCTCAGGT TCATTAAAC ATGCAGAATC ACAAGACCCC CCCAAAGTTA CCATGGTGCC  
AACCGACTCA AAACAATACA GACAAGAAGC TCAGCTCATC AGGAAGGCTG CAGCAGGCAT ATGGGAACCA TCTTGCTCCA  
CAAAGGACAG CTNAGATGGC AAAGATCCCT ACAAGGGTCC ATATCCACGG GG

SEQ ID NO:880: (Length of Sequence = 405 Nucleotides)

GAGCTAGGCA CCAGGCATTG TGTGAGGCC CAGGAGTTA AGAAATGAAT TAAATATTCT CCCCTGCCCT CTTTGAAGTG  
ACTCTAACGA GGAGACTTAA GANTTATTTT GTAATCTCTA GTTATATTIN CTGAATTTCA GAGCTTAAAT ATTATACTTC  
AACATGAGTC ACACCTTTAT TTATATGTTG GTTGTCTCA GCTGTGTGT GGGTTGGTGG AAGGAGACCA CACATACATA  
CACACAGAGT ACATACATGC TGTGTATGTT ACACACATAC TCACACCCCA CAAAGTGAAG CTCCATGCTC ATTTTGTTTA  
ACAAAGACTA GAGAGGCCTT GCAGACAACA GCTACCTGGA GCAGGAACAA GTGAAGCATG TTTCTGAACC ATTTCTCAAG  
TCACA

SEQ ID NO:881: (Length of Sequence = 336 Nucleotides)

GTCTTTCAG TCAAAAGTCC TTGAAGCTGG GACCTTGA AAGTCTGTCA GTTACATGTT GTTGGTAGTG GCTTGTMTTG  
ACCGTTTCAA AAAAGGAAGA AAAAACCCT TAAATCATTT TTCTTTCTC TTTTCTACTG CAAAGGCOGA CGAGATTGAA  
ATGATCATGA CGGACCTTGA AAGGGCAAC CAGAGGCGAG AGGTGGCTCA GAGAGAGGCG GAGACCTTAA GGAACAGCT  
CTCATCGGCC AATCACTCCC TCCAGCTGGC CTCACAGATC CAGAAAGSCA CCAGACGTGG AGCAGGCCAT AGAGGTGCTG  
ACCGCTCCA GCCTAG

SEQ ID NO:882: (Length of Sequence = 369 Nucleotides)

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TGCCATTAGC AACACTGTTC AGATGAGATA ATTAAGAAAA AAAGCCAATT GAATGATTGA GTGAATGANT GATTGAAAAT  
 CTTTCCGAAG TTATAATAAT AATTGTGATT ATTGGGGTCA AAGCAAAACC ATTTTAGTCT AAAAGATTGT AACTATACC  
 AACTTTTACC CAATTGGAA TGAAAAATTA CATTTCAAA CCATGTAGAA ATTCTGANCT CTTTGAAATA TTTCTTTTG  
 TGGGAAAGAA CCAGAAATTC TTGTTCATAT GTACCCATTT ATCTTATTIN AGTTACCCAA CCAAAAGATA AAATAATATT  
 CTCAAAGAGA TAATTGACTG GAGGAGTTTA AAGTGTATTAT AAATATTAG

SEQ ID NO:883: (Length of Sequence = 369 Nucleotides)

CTGCCATAAG AATATCAGCC TGGGGGCAGT CCAGACGAG CCCTTTGTCA TCCTTTCTGT TTGCCTAGTC TCAGCAGACT  
 GTGATCACA GGCATGTCT GTGGGATTTT NCCTTCCCT TTCTGTATCT CTCTGTGGT TCTAGGTGT TGGTTGTTC  
 ATTGTATGG TGGCTTTTA TTTAAGCC CCTTGAGCCC CATGATGGCT GGTGTACCC TGTTCCTTTA CACTGTGGG  
 CCAGGTGCTG CTGTCTTC TTAGGGCATC ATCAATTGCA AATATTTCCT TTGCTCCCT TTATGAAGAT GTCTTATAC  
 CCTGTCTTT CCATATTTT TTTGGGCAA GCAATGCCAT CTNCTTTA

SEQ ID NO:884: (Length of Sequence = 327 Nucleotides)

AGTTCATCTT TTTCCAGAGG GGTCTGGTG CTTTAAAGG GGTGCAGGCC GAAGAAGATG GTGGCTGGG GAACTGGAG  
 CTGAACCTGG ATTCAGAACT CTGAGGCACC GGGATGGGA TGGGAATAGG GACTGGCACA GGCAAGGGA CGATTACAGG  
 ATACGGCACC AAGAGGGTGG CTGGTGGAC CAGGGGGAC AAGGGGGAGC TAAAGGGCTG TGGGGGCACA GGGGCATAGC  
 CAGGAGGAG CTGACAGGT GGGGGCCGA GAGTGCCCTG GGAGGGAAAC AAATTCTTGA GCACAGCTTC AAATGGCAA  
 GTGGGCT

SEQ ID NO:885: (Length of Sequence = 380 Nucleotides)

CCAAAGCTT ATCCACCATG ATCAAGTGG CTTATCCCT GGGATGCAAG GCTGGTTCAA TATATGCAA TCAATAAATG  
 TAATCCAGCA TATAACAGA ACCAAAGACA AAAACCAT GATTATCTCA CTAGATGCAG AAAAGCCTT TGACAAAAT  
 CAACAACCT TCATGCTAA AACTCTCAAT AAATTAGGTA TTGATGGGAT GTATCTCAA ATAATAAGAN CTATCTATG  
 CAAACCCACA GCCAATATCA TACTGAATGG GCAAAACTG GAAGCATTC CTTGAAAAC TGGCACAAGG ACAGGGATGC  
 CCTCTCTAC CACTCCTATT CAACATAGGT GTTTGGGAAG TTCTGGGCA GGGCAATTT

SEQ ID NO:886: (Length of Sequence = 400 Nucleotides)

GGGATGACTT TAAACGAGAG CTGGACAGTA TTAATCCAGA AGTCTTCTT GGGTGGAAAG GAATGAGTGT TTCANACTTA  
 GCTGACAAGC TCTCTACTGA TGATCTGAAC TCCCTCATG CTCATGCACA TCGTCGTATT GATCAGCTGA ACAGAGAGCT  
 GGCAGAACAG AAGGCCACCG AAAAGCAGCA CATCACGTA GCTTGGAGA AACAAAAGCT GGAAGAAAAG CGGGCATTTG  
 ACTCTGCACT AGCAAAAGCA TTAGAATATC ACAGAACTGA AATACAGGCT GAACAGGACA GAAAGATAGA AGAAGTCAGA  
 GATGCCATGG GAAATGGAA ATGAGGAACC CAGCTTCGCC GACAGNAGGC TTGCCACAC TGATTCACCT TCGGAGATGT

SEQ ID NO:887: (Length of Sequence = 363 Nucleotides)

TAAATAAAT GCTCTGGATG GGAGAAATGT GGAAGTACT TTGGAACCTG ATAATAAGTA AAGGCTGAAA GAGTACTGAT  
 ATACATGCTA AATAAAACCA ATATTCCCT GAATGANTTA TTCAAAGCAA TTCTGGTGGG TGTTAGACAG GACATAGAGA  
 CCTGGAGAAG AAGCTCCCAT TTTCATAAAG AACACAAACA ATCATGTATA GAATGTGGT AGAAATATGA ATGGTGAAGG  
 TCAATGTAAT GAAGTCTTAG ATGGGAATAA GANAGGTAT TAGACAAGGG AGAAAAGTGA ATCTTGTTA TAAAGTGGCA  
 AAGGAACCTG GCCTGAATTG TATTCATGTA CTAGTCTTT CCT

SEQ ID NO:888: (Length of Sequence = 318 Nucleotides)

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ATCTTGCATG ATTAATACTA TTGGCCTGIN CCCTTTATCC TCAGCTGGTT GTACAATCT TGAATGCTTT CTTCCTCCCC  
 TGAGGATGCT ATAGATATTG TCCTACTGIN ATCTGAAATN AGTCGTTTGG GAGAAGTTTC TCCATCCAGA TACCTATAGA  
 GTCGTCTTT TTTTTTTTTT TTTTTTTTTT ATATGCCAAC NCTCGCTGTA TTATTCAGGC TGATCTGAAT CTCCTGGNCT  
 TTAGTGTGT GACAGCTTTG GCCTCTTAAA ACTGCAGGNT TACAGGCATG AGCCACAGTG CCTGGCCATC AAGTAGCA

SEQ ID NO:889: (Length of Sequence = 349 Nucleotides)

ACAGAAATCT ACGTAGACTT CTNCCAAATG CCACATGAGA GCACTGGCAG AATACAGAGA GACCGGCGAC CACAGCAAGG  
 AACTGTAAAG GCCAACAGTC CTCAGGCATG CAGGCCTGGG CCAACAGCAC AACGCAGAGT CGCTTCTTCT CAGTCCAGCA  
 ATTAAAATGA CCATGGCAGC CAGGGTTTCA TTAGGTACT TTCAAAAACC ACCTTTGCTG GAAAAAATGT TTGGTAGTTT  
 AATCTGCATA TACGGACAGT CATGCACCAC ATAATGATGT TTAGGTCAAC GATGGACCAC ATATTCAATG GGTAGTCCCC  
 TAAGGTTTAT AACCAGCATA TTTTTACT

SEQ ID NO:890: (Length of Sequence = 341 Nucleotides)

GINGTAGGGG TTCGTAGGTA GGGCTAGTAG GTAGGGTTAG TAGGTAGGGC TAGTAGGTAG GCCTAGTAGG TAGGGTTGCT  
 AGGTAGGGTT CGTAGGTAGG GTTAGTAGGT AGGGTTGCTA GGTAGGGTTA GTAGGTAGGG TTCGTAGGTA GGGCTAGTAG  
 GTAGGGCTAG TAGGTAGGGC TAGTAGGTAG GGTAGTAGT TAGNGTAGT AGGTAGGGCT AGTAGGTAGG GCTAGTAGGT  
 AGGGTTGCTA GGTAGNGTTC GTAGGTAGGG TTAGTAGGCG GTCTNCTCTT CTCCACCTT GGNCTGTGT AAAACNTTAT  
 TTTACAAGCA ATAGGAATTT G

SEQ ID NO:891: (Length of Sequence = 344 Nucleotides)

GACCTGGCTG CGCACCAGGA CGCNTGGAG CAGATCGCCG CCAITGCCCA GGAGCTCAAC GAGCTGGATT ACTACGACTC  
 CCACATGTC AACACCGGT GCCAGAAGAT CTGTGACCAG TGGGAGCCCC TCGGCTCTCT GACACATAGT CGCAGGGAAG  
 CCTGGAGAA AACAGAGAAG CAGCTGGAGG CCATOGACCA GCTGCACCTG GAATAOGCCA AGCGCGGGC CCCCTTCAAC  
 AACTGGATGG AGAGGGCCAT NGAGGACCTC CAGGACATGT TCATGTCCA TACCATOGAG GAGATTGAGG GCTGATTCT  
 CAGCCCATGA CCAGTTCAAG TCCA

SEQ ID NO:892: (Length of Sequence = 367 Nucleotides)

CTGGGCAACA TGGTGAACCC CATCTCTGCT AAAATACAAA AATTAGCTGG GTGTGGTAGT GCCTGCCCTGT AATCCCAGCT  
 ACTCGGGAGG CTGAGGCAGG AGAATTGCTT GAACCTAGGA GGTGAGGTGG AGGTTGCAGT GAGCCAAGAT AAAAAGAGTG  
 AGACTCCGTC AAAAAAAAAA AAAAAAAAAA TATATATATA TATATATATA TATATTNGN CTCCATCCC ATCTAGGTG  
 CTGCAAATGC CATTAATTCA TTCTCTTTA TGGCTGAGTA GTTTTCCACT GTGTATGTAT ACCACAGTTT ATCTTCTGT  
 TGATTGATGG GCGTTTGGG TGGTTCCACA TTGTTGCCAG TTGCAA

SEQ ID NO:893: (Length of Sequence = 220 Nucleotides)

GCAAAATATT TATTCCAAGT TAGTTATTTT ATGCAGTAGT TTCCCCCTOG AGACTGTGTA TAACCACATC TTTTAAATCT  
 GTAAATAATG TTATCAAAAT AATCTTAATC TTTGAAATCT CACAAAAATT TATATTTTAC AATCCACCCT GAATATCAAG  
 GCTGCAAGAN TAACACAACA TTCTTATAT CCAATATTT TACAGCTGTA CCCAAAAAGG

SEQ ID NO:894: (Length of Sequence = 313 Nucleotides)

GGGATTGGGA TTGTTTGGCT CTGAGGCTGT TAAGTCTGGA CTGATGCTGG AACTAATAT CAATGTTTA CAGGGTTGAC  
 TGTATTAAAT GATGTGCTA GCTGTGGGTA CAGATGCTTT GCACATTACT ACCCTCTATT CTCACAATCT TCCATGGGG



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ATGTATTAGA ATCCCCTTTT ATAAAGGATA AAGGTGAGGG TCAGAGAGAC TAGGAAGCCT GTNCAGGGTG ACACAATACA  
AAGTGTACATA AATTGGGTTT GTACTCAGCC ACTCTGCTTA TTAACATCAG CAGTATGGTT AATGGGGTGA CCG

SEQ ID NO:895: (Length of Sequence = 304 Nucleotides)

GGTCTAGATT CAGTTATGAA TGTAGGCATT AGTTAAAATT AACAGATGC AGAGTATTAA TTTCTTAAGA CAACAAAGTG  
ATTTCTGTAA GTTTGAGCCC TATGTGGAAA GCATTGTGGA ATCTTAACCT TTTTGTACAC ACTCTGTGG GACGTATCAT  
ATAAATGTCA GCACTAAGTA ATGCTTGTIT TGTGGCTGAA TATTTTNCST AGATGTTTTT GAAGTTGACA TGACTTACGT  
GCATTTAAAT ATATATTGCC ATCCCTTAGT TTGTAATTAA GGATTINGGA ATATGGGTTG TGGG

SEQ ID NO:896: (Length of Sequence = 337 Nucleotides)

GCAAAGTATT TCATCATATG CATGTACTGT ACCTTATTTA GCCAGCCCCA TTTTGTITGG CTGTGGGAGA ATTACAATAG  
CTGTITGAC TGTGTATCA CATGCCAGGC ACTGTACTGT GTATTATCTC ATGTAATTCT CATAGTTACT GCATGGTGTA  
GGTATTTTNA TCCCCAGTTT ACAGGTAGAG AACTGAACC CAGAGATGTT AAATAATTTG CCCAAGTTTT TTGGCTGATT  
ATACTGATGA AGATACTGAT ACTAGCATTC TGTGTCTAGT TATTTGCCAG ACAGAATTCT TTATTTTTTA ATACATAATA  
TCCATTTACT CTGAGG

SEQ ID NO:897: (Length of Sequence = 316 Nucleotides)

NATCACCTNA GGTGAGGAGT TCNAAACCAG CCTGGCCAAC ATGGCAAAC CCCGTNICTA CTAAAAATAC AAAANTNAGC  
CAGGTGTGGT GGTATGTGCC TGTAAATCCA GCTACTCAGG AGGCTGAGGC AGGAGANTCA CTGAACAGG GAGGTGGAGG  
TOGCAGTGAG CCGAGGTTGC AGTGAGCCGA GATTGCACCA CTGCACTCCA GCCTGGGCGA CTNAGCGAGA CCTGCGCTCA  
AATAAAGAAA TAAATAANTA AAGTGGGGAA GTTAGTGGTT TCTGGTGTAT TCAGAGTTGT GTACCCATCA CCTGG

SEQ ID NO:898: (Length of Sequence = 200 Nucleotides)

GAGATCTGGG GCTGGGGTAT GGATGATGGG GGAAGGGCG GTCCCTCTG CCACTGTCAG GGACCAGCCG GCCAACGCCC  
ACCCGNAAAG GTGTCTAAAA ANTTNAGCTT TTCACCCACC TGCCCTTTT TTTCAATCCC ACGCTGTTTC CTTTCAAAGT  
TCTGGGAGGA CGAACTCACC GAGGCGAGAA GTNTAACATT

SEQ ID NO:899: (Length of Sequence = 264 Nucleotides)

CTCTGTAAGT TAGCGTTCAT GTTTTCAGCC CCATGCAAAG GCGCAANACN TCAGACAGCG TGGTTCTNIN AACATNAGTG  
TGTTGGTGCCT CCCAGGAGCA GGGATTNAG CNAGGCTGCT GACACATAAA CACACCCCA CCTCCAGAAG CAGAGGAGAG  
GAGCCAGGG CCAGGCGAGG TAGCTCAGCA AGGACCCAGC ATGCTNCAGG TGGGGCCAGT AAGAGTCACT TCTCCAGCNA  
GGGTACAGA GGAGAGAGGC AAGA

SEQ ID NO:900: (Length of Sequence = 265 Nucleotides)

GCAATGGTA AAAAACCAAG TCAGCAGAAG AAATTAGAGG AGAGACCACT TAATAAATGT AGTGATCAA TAAAGCTAAA  
AAATACCACT GACAAAAAGA ATAATGAAA TCGAGAGTCT GAAAAGAAAG GACAGAGAAC AAGTACATTT CAAATAAATG  
GAAAAGATAA TAAACCCNAA ATATATTGA NAGGTGAATG CTTGAAAGAA ATTTCTGAGA GTAGAGTAGT AAGTGGAAT  
GTTGAACCA AGGTTAATAA TATAA

SEQ ID NO:901: (Length of Sequence = 381 Nucleotides)

CTTCTGTGCA TATAAAGAG AACAGTCTGG NCACTTGAAA ACAGACACCT TCTGGTTTTT AATGTGTTGG TCAAAGTGGC  
GATACAGCA GGTITGACAG GTGAACACAG TGTGCACTT GGAACACTTA TATATATTT TNGGTTCTCC TATCTGATG

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CCAGGATGCT GTGTGTAGGC GTGGGAATNT GTGCTTGGGG CAGACTTAAA CGCCATTGGA CAAATAGGAC ACTTGTAGAA  
 GACTTCACAG TGAGAACCTT GAATNTAAGA CTTACAGACA GCCACATCAG AGTACACAAC CATTGCAAAT GCACCACATC  
 GAAAACCAAC TCTCTCTGTG TAGTNCAGAC AGTTCCTTGT GCGGTGGGGT CTNGGAAGGT G

SEQ ID NO:902: (Length of Sequence = 331 Nucleotides)

GGTTGCCAGT GATCTCCTTT CTTATCACCT ATAGACAGCT TGCCTACAGG AAAAAAGAAA GCCAAACACA GACAAGCAGT  
 ATGAGATACA ATGAGCGCCC TTGGGCCATT AAAATATGAT TGTTTGGCCA AGGTGCGCTG GNTGCAAAAC AGCTCTCCAG  
 AACCTGCAGC CAGCACAGAC CAAAGTCAGG TTTGINTCCT CTTCTGTGTA TGAACAAAGG TTGATTCCAT ATCGTGGCTA  
 TTGTGAATAG TGGCAGTAAA CATGGCAGTA TTGTATGAAA ATATNACAGA TTAGNCCCTT TAAATATGTG CACTATGENT  
 GATCTATCAA A

SEQ ID NO:903: (Length of Sequence = 389 Nucleotides)

AGCAATACTA AACATAAATG TAAATTGGGC TAAATGCTCC CAATTAAAAG ACACAGAGTG GCAAGCTAGA TAAGGAACCA  
 AGAGCCATTG GTATGCTGTC TTCAAGAGAC TCATCTCACA TGCAATGACA CACATAGACT CAAAATAATG AGATGGAGGA  
 ACATTACCA AGCAATAGA NAACAACAAA AAATATTTCT AATAGATTTT TGCTTTTAAT AATGAAATAT GTCAAACCTC  
 TATAAAAACT ATATGTAGGA AATATAAANG TTTATATATA ATTCATGTAA TGGNTAATAG TAACTGAATA GCTAGTATTG  
 AATAACCAAG CTTCTTTTGG TTGTTTGTNA CATTGGGNA ATTGAACATG CTTAAAGGTA TTGGGAAGG

SEQ ID NO:904: (Length of Sequence = 285 Nucleotides)

AAATCAAGGA CCGTTTAGAT AGATGATGGG CTAGGCAGGT GGGGAAGAC AGAGCTCACT GCGCTTGGG GTCTCTGTGG  
 GGCCAGCCCC TATGCCCCAT GTGGCCACTN ATGCCAGCT TCCCCAACA CCCCACACA GGCCAGGTC AATATTACAA  
 AAGTGAACAA ATGCAACCTG TTCTGCTTT NACAAATGAC ATGCTCTCCAT CCCCAGCCAG CAGGGGTAGG GGAGGNCGT  
 TGAAAGTGNC ACTCCGGTTA AAAAGGCAAC AACTTTTATA AAATG

SEQ ID NO:905: (Length of Sequence = 374 Nucleotides)

GAAGCAAAA GTTGAACCTT TAAAGTGCT GAACACAAAT CCAAATCGA ATGGTTCAAG CAGCGTGAA ATCGCTCTTC  
 ATAAAGTGGG CTTAATCTC TAGTTTAAAT TCTTTGATG GAATGAATTA ATTAATGTGT CAGGTGGCTT ATTTGTGGAT  
 GCCATGATTG ATGATGTTCA TTTTAAGCTC TTACCTATAG TACAAGTACA TGATGCTACT GAATATTTTT TCCACTTGGA  
 AACGTGAGC TGGGTGTGTG CATTAAACA CACATACANA CANAATCANN AAACACTGCG GACTTTTCAC TCAAGCTGGG  
 TCTTTCTTC CCCAGTGGTA AGGGCAATC CTGGCTTANC TAACCAACAC CCAC

SEQ ID NO:906: (Length of Sequence = 375 Nucleotides)

CTGACTGAAA GGCTCTTCC AGCTCCAACA CATGAAGGT CCATAATTT CCCCAAATGT CTGCGCTCT GAAACTTCA  
 ACTATCTTAA TATTGTGAC ATTTATGCT GTGTATGSCA ATCTGATGT AAAAGGAGCC ATATGTAAAT AATACTGAA  
 ACTTGTCAA AATAATGTTA AGGAAACATA ATTAGCAAAG CAATATATAA TTNCAAGTCC ACTGATTTAG AGAATCAGAA  
 GTAACANTTA GAATCAGAAA TAACAACTAT CTGGCAGGGA TGGAAAAATG AGAGCAGATA TAAAGGTGT ACCCCAACCC  
 CTGACCCAC TGCCCATTTG GGTGTGCACT ATGINTTCC AATATTAATA TCTTT

SEQ ID NO:907: (Length of Sequence = 390 Nucleotides)

GTGCTGACTT CAGCAGCCCT CTGAAAGGCC CTTCCATAA GCTGGGAAG TATGATCATG GTTTCATCAT CTTGTGTGGT  
 TATTACTTCA AGGTGACCA ATCTGAAAGC TCTGTGTGAA GAAGGGGACT GAGTGGCTGT GAATGATGAG ACCGTGTGTT  
 AAAAGCAGG CTTGCTGTA GGTCCGGAAG AAGCAACTC AATCTGTGC TTTACCATAG CACCACCTGC AGGATATCAG

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GAATAGAGAA CCCAGCTGAG CGACTCATGC TTNACCAAAA ATACCCAGAG CAGTGTGTCT CTACCTTTTT AAGCCCATGC  
TCACTAGTGG GGAAACAAT TTACCCCCC TGTATTTAAA TATGGGGATT TCAAGGCAA CAAAAGCATT

SEQ ID NO:908: (Length of Sequence = 207 Nucleotides)

CTGCATACA GGTTGTAAGT TATTACATTA TTCTNCCTC CTGCTACCT GCAGTTGGTT TTATGAGGGG CGTTAGTACA  
CTTCCCAAAG GGCTTGCCCG CAGGTINAGA GGTGCACATT GAACTCCCTC ACCAGGCAGA TGGGAAGTGT GGCCATGAGA  
GAGAGCTTCA GGGGNCCTNG GNTTATNACA TCGCTGGGCC AGGANAT

SEQ ID NO:909: (Length of Sequence = 339 Nucleotides)

GCAAGAGAAC CTGATATAAT ATCTATAAAT TTGATTCCC TGGGGTATAA CAAGTAAATA ATTTTAAAT GGTCCTTAGC  
AAGATTGGTT CATGGNAAAT GAAGCAATTA TGGCTTGANT TTATATGTAC AATATTTATT GTCTTAATTT TAATTTAAAA  
CGAATGACAT GTCTCTTTT TTAAAAAAG TCCTCTTTTA AAGATCTTGT AGTTGATGTG ATGAGCTATG CACTGCTAAA  
TATTTATCCA CACATAAATA TTIGANAAGG AATATGNAT AGTCATGGGA TGTAGTTTCA TCTCAGTGCT CCATGGAGGG  
AGTGTTTTCA CCTCTCTCT

SEQ ID NO:910: (Length of Sequence = 372 Nucleotides)

CTCAACTGCC ACTCACCTAT CTACCATCCA CTACCCANIN ACCACCCACC ATGACCCACC ATTTGCCATC TACCCATCCA  
TCAATCTAT AAATAATTAG TAAGCACTTA ATGCATGCTA GGTATTATTT TAGGCACCAG TAAGACAATC ATGGGNAAAA  
AAGACAGACA ACCCCGAGC CTCCCATCCT CAGGGAGCTC TATTCCAGTG AGAACAATCA ATGTCTAGA TTGTGAAGGT  
CATCAGTGCT TCGTCCCGT GTAAGACTGA GGTCCAGG CCGAGGACC AGNCTGGGC AGGGCTTCCC AGGGGTCTNC  
T...AGGGGA CTCTCAGGAG TCCAGCTGCT GCCCCTTAGC TNAGCACTG GG

SEQ ID NO:911: (Length of Sequence = 377 Nucleotides)

GAACTTCAAA AAAAAAAAAA AAGAGGAGTC ATAATAAATA TTINACTGTC TAGTCAACC AATTATGAA GCCTGATTAT  
CTAGCTNAGC CTCGGAGAT TGCTACCGGA AATCTCCCA GATGTTCCC CTCTAACC AACTNTCCAC TGINTGSCAG  
GAAGGCAGCC GGCATCTGC ATTCGGAAG CCCAGCTGCT TGGGAAGAGA GAGGGAGCGG CCTGCACGTN ACTCAACAGC  
CCTGCCTGCT AACCAGTTAA CCAGTTCTCA GTTGGGTTCA CGGACCCATG AGCGACCCAG CTCTCTTCCC CTCAGGTGA  
TATTGTCTC CAAGCTNGGG GATGCCCGG GGGACTATGT GGAGGAGAG TTCCTTA

SEQ ID NO:912: (Length of Sequence = 370 Nucleotides)

ACAATCTACT TGCTACAGAA TCAGGATGTA TTINCTATT TATAATAAAC TACAGAAGGT AGATTTCAA GGTAAATGGCT  
GTTATGGAAA CCTACTGAG GTTGTCTGCT AAAACCAACT CAGTGTGCAA AGCGAAATAC ATTINCTACT TCAATAGCTC  
CTCATACTGC ATCTGTCTGT AGAGTTTATT TCAGTAAAAC TGTTTACTAT TTCATGATGA GTAGCTAGAA TTAAAGCATT  
AAGTAGCTTG AGAAAATAAT CTATATAAAT CTTTATATCC TACATATGGC TATAAAAATA AATTTATAAT TTTAAAAATT  
GTTTAAATA AACATTTATT TTTTACCCTA CCAAAGTAAA GGGTATACAG

SEQ ID NO:913: (Length of Sequence = 313 Nucleotides)

GTATCTGGTT GCCACATCCA AGAAGAACGC GTGCNINTCG CTGGCTTIN CTTCCTCTA TAAGGTGGTG CAGGINTTTT  
CCGAGTACTT CAAGGAGCTG GAGGAGGAGA GCATCCGGGA CAACTTNTT ATCATCTACG AGCTGCTGGA CGAGCTCATG  
GACTTGGCT ACCCCAGAC CACCGACAGC AAGATCCTGC AGGAGTACAT CACTCAGGAA GGCCACAAGC TGGAAACAGG  
GGCCCCGGG CCACCAGCCA CGTNACCA CGCGGTGTCC TGGNGTNCG AAGGCATCAA GTATCGGAAG AAT

SEQ ID NO:914: (Length of Sequence = 389 Nucleotides)

TTACAGGCGC CTGCCACCAT GCGCGCTAA TTTINAGTAG AGATGAGGTT TCACCATGTT GGCCAGGCTG GTCTCAAACCT  
CCTGACCTCT GGTGATCTGC CCACCTCAGC CTCCCAAAGT GTTGGGATTA CAGGCGTGAG CGACCGTGCC TGGCCTTCTC  
CCTGTTTTTC ATAGTGAAGA AAGGACACCC AAATTTTGAT CTGGTTCAGC TATTCATAT TCTATCCTGT GTGGTCTTAA  
GCAAGTTACA TAACTTGCTT ATATCTCAGT TTACTTAGCT ATAATATAAA TTAAATTGGT CAAATGTTCT CTAAAGTCTT  
ACTAGTTACC AGTGTTCAT GGGCCCAACA GCATCTACAT TACCTGAGGA GGCTGGTAGG AAATGCAGG

SEQ ID NO:915: (Length of Sequence = 328 Nucleotides)

CNOCAGCAGA TTTINATTAG ATGGAAGATA ACAAGCATT CCNCATAGGT AAGTGGTAAG AAATGGCAAG TACAGCCAAG  
CCACAGAGGA GTGAGGACAT TACTGGCTAT GGGAAATGGT ACTTATGAAA TCTAAGGGTT GGGTCTCTG ATGAACCTTA  
ACTACCCAGT AAGCTCTTCT CTTTGGCACT CAATATGACC NCTGCTGGCA TGAAAGGGNC TACAGTAGCT ACTTTCAACT  
TGGCCAACAG TTCTTCCAGT TCTGGTCGAG CTTTGAATCG TCCCTTTGAA GTCTTTCTTC AGNTGGTGCT CCTTCAACTT  
GACAAGTC

SEQ ID NO:916: (Length of Sequence = 365 Nucleotides)

CAACTTCAAG GTGCTGCAAG AGCTTTCAG AAGATGGGTG TTGACAAAT CATTCCCTGTA GAGAAATTAG TGAAAGGAAA  
ATTCCAAGAT AATTTINAGT TTATTCAGTG GTTTAAGAAA TTTTGTGACG CAAACTATGA TGGAAGGAT TACAACCTC  
TNTGGCGCG GCAGGGCCAG GACGTAGCGC CACCTCTTAA CCCAGTTCCA CAGAGGAGT CCCCCACAGG CCAAAAAAC  
ATGCAGACCT CTGGCCGCT GAGCAATGTC GCGCCCCCT GCATCTCTCG GAAGANTCCT CCATCAGCCC GAAATGGCGG  
CCATGAGACT TGATGCCAA ATTCTTTGAA CTCAAACCA CAGCT

SEQ ID NO:917: (Length of Sequence = 400 Nucleotides)

GCATTATTTA TTGAAAACCTA TGTATTTTTT TGTA AAAACC TGATCACATA GAGAAATCA GTGGCTATAC CCTCTCTGGG  
CATCAGTTTC CTCATCTGTA AAGTGGGGAT AATCACAGCC CCCACCACAG TGGGCTTCAG GGAGGAATAA ATGCATTAC  
ACATGGCAAG TCAATTAGGA CGGTGCTGA CAGGCTGTA GCGCCCAAGG TTGTGACTTT TGCTTTTCTT ATTGCTACTC  
TGCAACCAAC TTTAGATAGT GGTAGANTAA TCAGGAGGCC CTCTGTAATG GGATATTTTG CACAGAAGAG GTCCAGAGC  
GAGTGTGTGT GACATGGGAG CAGAAGACCC GGGGTTINAG CCAGGCTCTG CCACTCATAC GGTGTACAAT TTTCAAAGG

SEQ ID NO:918: (Length of Sequence = 348 Nucleotides)

CTATTGCACA TGGTAACTCT GTCATACATC TATAAGCCT AGTAGCTGTA TTGGGTGAGA TGAAAAAAC TGCTTATATT  
CCACAGCAAC ATAATTACAA ATAAGTTTTA ACCTATTAAA GTACAGAGTC TCTCTCATCA CTTTCAAAGC AGGACCTAC  
TTACCAATAA TTCAATAGCAT ACCTCCCTT ATTTTAAAC TCATATGATA GCTGATTTCC TAACTGTAGC AATCAGGATT  
CTTAGAAAGA TTGAAACTG AATTAGCTA ACTAAGGAAG CGGATTTCTT TAAAAATATT GGGTTAGTTT ACAGGAATCA  
GTAGTGGAGG AACCAGGTT GCATAAAA

SEQ ID NO:919: (Length of Sequence = 345 Nucleotides)

GGGATGACTT TAAACGAGG CTGGACAGTA TTAATCCAGA AGTCTTCTCT GGGTGGAAAG GAATGAGTGT TTCANACTTA  
GCTGACAAGC TCTCTACTGA TGATCTGAAC TCCCTCATTG CTCATGCACA TCGTCTTATT GATCAGCTGA ACAGAGAGCT  
GGCAGAACAG AAGGCCACCG AAAAGCAGCA CATCACGTTA GCCTTGGAGA AACAAAAGCT GGAAGAAAAG CGGGCATTTG  
ACTCTGCACT AGCAAAAGCA TTAGAATATC ACAGAAGTGA AATNCAGGCT TGAACAGGAC AGAAAAGATA GAAGGAAGTC  
AGAGGATNCC ATGGGAAAAT GAAAT

SEQ ID NO:920: (Length of Sequence = 299 Nucleotides)

CCCAGGTACT CAGGAAGGG GCAGGAGAAC CACTTGAGCC AAGGAGTTCA AGGCTGCAGT GAGCTGTGAT CACACCACTG  
CATTCAGCC AGGACAACAG AGTGACATCC TGTCTCAAAA ATAAATAANT TTTTAAATGA TGAAACTAAC TAAGGTACTG  
AGGAGGTAAG ATATTTCCCC ACGGTAAGTC ATTCAGAAAC TAAATGTGAA AAACCAAAAG AAGCCTCTGG GGTAGTATT  
CCCAGTCTCC TTGTCTGCCC AGGACCCAC ATTTGTGTAA GTTGCTAATT GCACAAGGG

SEQ ID NO:921: (Length of Sequence = 234 Nucleotides)

ATGAAGCAGA GGCAACCAAC AGAAATTGAC ATCAGAACT CTGCTGGENC CCCACCAGCA TGCTACCGAT GANTCCTGCT  
CTCTTTCAGA TGAAATTTTA TTTTTFNCC AATAAGGCCA GCOCTACCT GGAATCTGGA ACCANTTCTG GCCCAGGGTA  
GAAAGGCTAC CAAGCACCTA TGGTAGAAGC CCTGGTGTCC AGGNATGCTT TGGNCTTAT TATGACCTT CTCT

SEQ ID NO:922: (Length of Sequence = 328 Nucleotides)

TAGCAGGGTT ACTGGCCTTG GCTGCGGCCA AGGGAAACT CTGCAGGCC TATTACTTGG CGGCCTTTAA CTCTTATAGA  
ATTGGGAGAG AACACTGACA AAAGCGAGGA CATGATTTN CGGTACAAA TNATTTTCTT TGCTTGCTTT CTCTCACCC  
TTTINAATIT TCTTTTCIN CTFTTCTGT CTATCTTACC TTCCCTCGT GATCCCTGCC AGCCCTCCT TTCTTATTAT  
AGCTGATCAT GGCAGTATTG TTTTTFNCTG GGTAATAATC AGAGTGGGAT TTAGAGAAAG CTTAGCAGGC CTAGCATGAG  
GGCCTTAG

SEQ ID NO:923: (Length of Sequence = 371 Nucleotides)

CAGGAAACCT ACTGTGAAA TGCAGAAAA CAACAGCAA AATTGATTGT TGACTCAATA TGATATATAG TTCAAATGTA  
AACAAATGCT TGTNAGCAAT CCACATCACT GAAGGAAAAA AAGTAAGTTA TTATTTCCAA TGTTGGGAGT TAGGTGCTA  
TAAGCTTATG ANCACACACT TTCAGTGAAT TTATGTAGAA TCGGAAGCAC TTCAATCTCC CCTCACCACA CATCACCCCC  
TTGCTCTCC TCGACACGTG CAAAATGATA GGGCATGTA GGGGTGTAG TGAAATNGAG AAGGCATGCC CCATCTCAAG  
AAACAGGGTG GACCAGCCAC AGCTTTCAGC TCCANTTGT GATACAGGAA T

SEQ ID NO:924: (Length of Sequence = 100 Nucleotides)

ATGATCTGCT TTTTTTTGAT ACCTTFACTT TINAGT AGNGCGGG TTTCTGGAGC CGACTGAGGG ACTGGAGAAG  
GCTACGGGGG TCTCGCCCT GCCAGGGCAA TCTT CTCTTNATCA TTGGTTATG CAAATCGGG TAAAGTTTTT  
COGAAGGGG TGCTGGCTCC TCTTGGCAGC TCTCTTACT GACTTTGGGC ACCAGGGCTG CTCATACCTG CAGCCTTTTC  
GGCCTCTNG GCCCGCAGG GTCCGGCCTC COGAAGCACT GCCATGGCCC GGAATAGCAG CCCNGAGCA AGG

SEQ ID NO:925: (Length of Sequence = 317 Nucleotides)

AATGCTTAT GATCAACTTG CCATAGGACT GATGGATTAA CCAGTGTTCG GCTTTATTTG AAGTCTATGC CCGCACAGC  
TCTGTATGT ATTINAGATG CTAGAAGTTT TTINAGCATG TNATGTGTA TTCTTGTG AATTCTAGGN ACCTTGTCCA  
ACTTGGTTCT TTTCAAGGT TGTTTGGGT ATTCTGGGTC CCTTGCTTTT CCATATGNAT TINAGGATCA GCTTGTCAAT  
ATCTGCAAAA AAAAAATCAG CTATATTTTG ATAGAGNTT GTATTGCATC TTTAGGANTG GTTGTGTGAG TATTGCC

SEQ ID NO:926: (Length of Sequence = 247 Nucleotides)

GTTATTCATA CCACAGCATT TAAAAAGCAA TCCGCAAGTN ATAAAAAAA AAAAAAAA ATGATGTGAC ATATCCATTG  
CCTGANITGC CTCTTTTGTA AGCCAGTNTT GGGATTATAG CAGAGGAGTA GCAGAAATAA NTATATTCAG ACACAAACAT  
ATAGATATAA TAATATCCAA CNCTTTATA TGATTIAGGG TCTCGTTAAA ATGTTACCA TTTGCTCTC CTAAAAANTA  
TATAAT

SEQ ID NO:927: (Length of Sequence = 286 Nucleotides)

GGCTGTCATG AGAATCACTT GAACCGGGA GGCGAGGTT GCAGTGAGCT GAGATCATGG CACTGCACCC TAGCCTAGGT  
GACACAGCAC AAAAAAANC AATGTTCCAC AAGTCAAAAA TTGINTTCAG GGAGTAGAAA AGTAGTAGGC TAGGTATCAA  
AGGGTATGAA TGACTAAGTT CTTTCTATAA TATATTGACT ATAGGTTAGG AGATACACTT TCAGTTCCTG TTTTINTAG  
ATCTCCCAAT GATCTGTCAT TTAAGAGTAC ACACGATGAG TGGAAA

SEQ ID NO:928: (Length of Sequence = 349 Nucleotides)

CTTGTTTAAAC CAGTATTIAT TGCACATGGT TTTGTTATCT ATTGCATGTG GTAAATTACC CCATACTTTG CTTCTTAAAG  
CATTAGACAT TTCTGTAGGT TAAGAATTCA GAAGCAGCTT AGCTGAGCAG TTCTTGCTCA AGGTCTGTCA TGAGGTTGCA  
GTCAAGGAGC TGGCCAGGGC TGCAGTCATC TGAAGGCCTG ATTGGGGCTG GAAGACTCCC TTTCAGATG GCTCCCTCAC  
AGGCTTGCCA TGTCAAAGCT GGATTGTTGG CAGGGGACCT CCATTCTTCC CCACATGGGC ATCTCCATAG GCTGTTTGAC  
ATGGCAGATN GCTTCCTCCA GCAACTGGG

SEQ ID NO:929: (Length of Sequence = 395 Nucleotides)

AGAGGAGSCA GCAGCCACCC CCAAGAAGAC TGTACCTAAA AAGCAAGTTG TGGCCAAGGC CCCAGTGAAA GCAGCTACCA  
CCCTACCG GAAGGTTCT AGCAGTGAGG ATTCTCCAG TGACGAGGAA GAGGAGCAA AAAAACCCT GAAAAATAA  
CCAGGTCCCT ACAGTTAGT CCCCCGCT TCTGCTCCCC CACCAAGAA GTCTCTGGGA ACCAGGCTC CCAAGAAGGC  
TGTGGAGAAG CAGCGGCTN TGGAAAGCAG TTAAGACAGC AGTGATGAGT CTGATTCAAG TTCTGAAGAA GAGGAAGGAA  
ACCCCAACT AAGGSCAGTA GTCTCTAAG CAACCACTAA ACCACCTCA GCAAAGAAAG CAGCAGAGAG CTCTT

SEQ ID NO:930: (Length of Sequence = 214 Nucleotides)

ATCCAACAAT GACAATCCT CTTCGGACAA TATTGGCACT CCATTCAAAC CTGTTTCAG GTCAGTCCGC ACTTCATCAT  
CTCCCAATTT GTCCAAAACA TACTGTAGCT CAAGTACAGT TTTTAAAGT TTCTGTNCAG CTCTTCTCT CATAAGCTGC  
TCCGACGTG CTGCTTCTT NATTGTTTTC TGAATATCTT GACTTAGTGC CATG

SEQ ID NO:931: (Length of Sequence = 245 Nucleotides)

GAAAGTNTT ACAACATGA TGCTTATCTA ATAAATATC ACTGAGCAAT AAGGAGAAAT ATTTTAAATA GATTTGAAGT  
TGTGAACAAA TAATTAGAG TCCAAAGAGG ANAAGANAA TTAAGTCTGT TTTTATCC TAGAAGCTAG AAACTTTACT  
GGATTGGTCA ACAAGACAA ACTTTTATT GTATAAACA GTAGANTTCA TGGAAAGGAT AATNCTTTTG GAACAGGCTT  
CTGG

SEQ ID NO:932: (Length of Sequence = 303 Nucleotides)

CATATTGGGG GCCAATATA AAGCAAAGCT GGAAGAAGG ATGATCCATG TATTINTGGG GATGGGATAT GGACAGGGAA  
ATAGTGTCC AACTCCATGC TGAGTGTGT TTTGAATTGT AATGTGAAGT TGCCACCATA CCAGGCTAT GACTGTNTAC  
GATGTCAC CCTGTAGGC TAGTAGCTT GCAGTGGGAA AAGATGACAG GGCCACTTGT CCAGGGCAIT CAGGTATATA  
AGTCCCTGAG CTCAGTTG CTAGATCTAA GGAAGTATT TTCCCTTCAT GTCAAAGATG GGG

SEQ ID NO:933: (Length of Sequence = 186 Nucleotides)

CTCTTTTGGG CTGTTTANA TCTCCGGGA ATTGAAAGCA GTGATCTCTC AGGTGCTAAC CGGNATAGTA TTAGAAGACT  
CCAATATCTT GCAGCCTGTG GGACTTACT TATTCTCTT TGTTTTGTT CATTGCTTT TGGGTCTTG GTCATGAGGT  
TTTGCTAAG CCAATGCTT CAAGG

SEQ ID NO:934: (Length of Sequence = 336 Nucleotides)

GGGAAAACGT ATCAGCACAT GAAATACCTT GTAACATTTT CATTATATA ATTTGCTAGC TGTCTTTGC AACATAGTGA  
AAAATAATCA TGTCGATGT TTAGTAGGCA CATAATAAAT AGTAATGGAA TGAATGGTTG TATATTTAGA GAGCCATGCT  
GAAAGGTTAA ATAGCAAAAT ATGACTACTT GGAGAATAAT GTTAAATTGT CAAGGAGAGT AGTGTTATAT GAATACTCAG  
ATGGATGGAT ATATAGANAA TGAGAAAAGC GACAGAAGGA ACTTAAAGAG NTTTTAAAA TAGCTTTGTC TAAAGATTAA  
AAATTAAAGG TTCTAA

SEQ ID NO:935: (Length of Sequence = 383 Nucleotides)

AGGTAAGAAA ACTGCTGAGT GGGCTCCTTG TACCAGCACC AACCAGCAGC CCTTGACAGC ATAGATGGGA TGAGTGTAAAG  
GGCTATCCTT AGCATAAGGG AAGACGGTT ATAAGCTGAG AAGATTGAAA GAAGAATGGA GCCACAAAGA GAATAGCATA  
AATAACAAGA AGGAAACATG AAGAACAAGC ACTTAAGNTA TTAACTTTCA GTCTTTCTCC ATTCTTGAT GTCTAATGAG  
GCAAATAAC TGGGCAAGGA CCACCAAGAT GAAGAAGTTA AATAAAATGT CACAATGAAA TINAGGTGCA ATAATACAAC  
TGTTGACTGA CTTTCCAAAA CCACGGTGAT CGGTAGAGTA TCATCAATGT TACCGAGGAT TTT

SEQ ID NO:936: (Length of Sequence = 204 Nucleotides)

GAAGCTGTGC CACCTTCTN AACITTINATG AGCTGCCTNA GCCGCCAGCC ACCTTCTGTN ACCCAGAGGA AGTGGAAGGG  
GAGCCCCGAG ATGCCCCCA NACCCCAACT CTGCCCTCAG CCTTGAGGA GCTGGAGCAA GAGCAGGAGC CGGAGCCCCA  
CCTGCTAACC AATNGCGAGA CCACCAGAA GGAGGGGACC CAGG

SEQ ID NO:937: (Length of Sequence = 386 Nucleotides)

CTAACTAAAT AAGGGTTGCC AGATAAAGTA CAGAAGGCCC AGTTAACTT GAAATGCATA TGANCAAGAA ATATATTINA  
GTATGANTAT GTCTCATGCA ATATTGGGA CATAATTATG CTAAAGAAAG TATTCACAGT TTINCCAACA TTCAAATTGG  
AATGAGTGTC CTGTATTTIN ATTTGCTAAA ATGGGCAACC CTAAGCTGGT ATCTCTACAG TTACATACAC TTACCAACCC  
CACCCATTCA TACTGGTCCA AGTTACACCC CAAAGAGGG CAGAAACAGA ATCTGAACAA GCTCAAGTTT NGAGGGCAAA  
AATGTTTCAT TCTGCCCTCT GGATTCCTGT ATGAAGACIT TTGTTGTGAA AGATATGAAT AGAACC

SEQ ID NO:938: (Length of Sequence = 349 Nucleotides)

GACACTTTCA GAATTAAGAA GCCTTGCCCT CTTTGGGTGT CTTCACAATT GINTTAAGTC TATTATAGTA TTCATTTTAG  
TTTGAAAGCA ATAAATACAA TATTAGTACA AGCACACTGT CAAGAAATCC CTAGAATATG GCTCCTCTGA AGGTTGACAT  
GGTCTGCCCT CGCATGTATC TTTTCATCTC CAGCATCCAG ATCAGAGTCA ACAACAACAA CTCTACAAAT ATCAGGCTTC  
TTGGTGGAAA GAAATCTGGA CATTTTINCT ATGAAAAAA AGTTAGGTTA CATGGCATT AATTTTGTG TAGACTTAAC  
CTACAGAAAA TGTTTCAAGC TTATAAAA

SEQ ID NO:939: (Length of Sequence = 374 Nucleotides)

GAAATAAAGC CTCACAAGAA ATAAGGTGCT TATGGTGTTA AGTTACAATG GAAAATAATC AATGGCATT GTATGCATGC  
TGCAATGTGT ATGTAGATCA GTTCATAGGA GATGGGGCAA CAAATAAATA TCACCATGGG GATGTGATCA TCAAAACCCA  
GGCTGTGGAA AACTGTCACT CAAGTTTCTT CAACATATTG CAAGAAAAAT ATGATGGCTT GAAATCTAT AGATGAAGCA  
ATTTAACAAA CCTACCAATC TCATTTAATC TTGATTACTT TTAATAAAG ATTAATAAGA TGACAGAGAA AGGGTTTAA  
AATTTGTAAG ACACGGCTGG ACGGTGGGC TCACCTGT AAATCCAGCA CTTT

SEQ ID NO:940: (Length of Sequence = 385 Nucleotides)

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GTAATCCCAG CTACTTGGGA GGCTGAGGCA TGAGAATTTT TTGAACCCGG GAGGCGGAGG TTGCAGTGAG CAGAGATCAC  
 GCCACTGCAC TOCAGCCTGG GCAACAGAGC GAGACCCTGT NTCAAAAACA ACAAATAAA TTTCTTTTA ACATCTGNC  
 CAAAAATGAG ATAAGCGTTA TCAGGGCAAG TCCATCTCA TCACTCTTTT CCTCCCCACT GOCCTCTCCA CGATGCCAG  
 CTGATCAAAA GTCATTTTTC CTCATAAGAC CAAAGTATCA TGGGATACTG TGCAGTINGA GAGCAGGTTG ANCATCAGAA  
 ATAATTGCTG ACAATAAAGT AAAAGATGGG AGAAAAGCAA GGCCNATTGT ATATAATACA GCTTC

SEQ ID NO:941: (Length of Sequence = 406 Nucleotides)

GGTAACAGGT TTTTACCAAC AATGCTTGT AGCTAATGTA GAACATACTT GAGAAAATGG CTCTGTGAA AGACCAGTTA  
 GTACCAAAAT AATCTGGCCC AGAAAAATAG CCACCATCTT TGAATACATT AATAGAAATA GAATAACCCC CAAAGGGAGA  
 TGAGAAGCAT TCTAAAGTGC ACTGATCATG AGTTTCTATG TGATGATTGG TGTCCTATTG GAGCTCCAGT GCTTTAAAGC  
 TGAAATGAAT CCTGGCCTTT CACCACCTC CCTGCCATA GTATGGTATA TCTCTTATT CCTTCCCTCT TAGCTTACTG  
 AGAGTGTAAAT TTCCAACCAG TTAAGGCCAA AGAGGACTAT TTTCTAGGAA AGGAGAGAGA GATGAATTAG CAGTTAATGG  
 AGGAGT

SEQ ID NO:942: (Length of Sequence = 296 Nucleotides)

GATGGCTCAT GCTAGTTTCA CAAATATTGG GOCCTTCTG GAGAAGAGAG GCTGTATCTC CATGCCAGAG CAGAAGTCAG  
 CATCCGGTAT TGTAGCTGTC CCTTTCAGCG AATGGCTCTT TGAAGCAAA CCTGCCANTG GTTATCAAGC TCTTACATA  
 CCCAGCACCG ACCCCCAGGA CTGGCTTACC CAAAAGCAGA CCTTGNGAA CAGTCAGACT TCTCCAGAG CCTGCAATTT  
 CTTCATAAT GTCCGGGGAA ACCTAAAGGG CTTAGAAAAC TTGGCTCCTC AAGAGT

SEQ ID NO:943: (Length of Sequence = 223 Nucleotides)

GTGCCATTAC AACTTNTCTG TAACCCTGAA ATTGTGTCAA AGTGAAATTT TTTTAAATGA GATTATAAGA GCATAATCAA  
 AATGGAATTT CCTTAGGATA CCAGAGAATC ATTTCCTCT CAGGTAAAGG ANTTTCTCT TINGTAGTCC AGAGCTATAC  
 ATGATTAGA AANTGTTTCA NCCAGGAAGA TGACATCTCT GCTAACCTAA TCGATTATCA TGG

SEQ ID NO:944: (Length of Sequence = 327 Nucleotides)

CCAGGCATC AGGCTGGCTG TCCCTTNTT CCTCTGCC ACCCATCCA CTCTGAGCAT CAATGCAGCC GGCCAGTTGC  
 AGGCAACCAG GCAGCACCTT GGCTGCCAG GCAGGCTAAG AGCCCCCAC CCACTCCCC CTCTTTTGGC AGTGGAAAAG  
 CTTGCCGTAG GCATAGCTTT CCCAGCCTTC CCTGCTTCAN AGGCAGGAGC ATGGCACTCT GGGAGTTGTA GTGCTCATAA  
 CACTCAGGCG ATCCCTTGTG CAAATACTG GAGGAGAGGA CTATGGTATT GGGGAAGAGA AATTNAGGAA TAAGCAAGGA  
 GTTGGCT

SEQ ID NO:945: (Length of Sequence = 222 Nucleotides)

CTTAAACAAT AAATACACCT GAGTTAGTTT TCCAAACCTT TCTCTCTGAT TAAATGCCCT TAAACTTAA ATCTCTTGT  
 ATCTTCAGTT GTGATCTAGT CCAAGTGA AATTACGTTT AGCTTTAAAA CCAATGAATTT AAAGCTCAAG CCGTAGCTG  
 GCTGCTAGG CANTTTATGA TTAGTTTCAC AGAATAGCAC CCACTGGCTA CACAGNCCC AG

SEQ ID NO:946: (Length of Sequence = 286 Nucleotides)

GCTCTCTCTA CCCCCTCATC TAGGTATGTA TATAGCTCAT TTATTAGGG GTGATGTTAA AAAATTGAAT GCCCTTAATG  
 GCAAGGGAAC CAACCAATCA ATGTGGATGC CACAACCTTT TCCCTGTGT ACTGTGTA TGGTATGGA AGTATTTT  
 TTTTCTCCA GCTTTTATT CAGGTTCAAG GGATACATAT GCAGGTTTGT NACATGGGTA AATTGCATAT TGTAGGGGTT  
 TAGTATACAG GTTATTTTAT CACCAGGNA ATAAGCTAG TACCTG



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TTATAACATT TTGAAGAAAA TCTTTAAAAA TMTTGTMTA CACAGAAAAT AATCTTAGAA A

SEQ ID NO:954: (Length of Sequence = 217 Nucleotides)

AGAGCTTAAA AATAGTGAAG TCTTTATAAG TAATTTTAA AAATTTAAAC TAGGACCATA AATTCTAAA CTATGAGATA  
AATGANCAAG AAAACAAACA GGTGTTTAGG AAAAGGTATG TATATGGTCA ATGAAATAAA TACAACGTGA TTTTAAATGA  
GANTTAACAT ATTTTNNITT AACAAAAGCA GCATGTAACA CACAATGTAT TATATGT

SEQ ID NO:955: (Length of Sequence = 260 Nucleotides)

TATTGATAG AATTTCTAG TGAAACCATC CTGACTGGG GTTTATTTT GGAGGAATTT TAAGTTATTA ATTCCGTCTC  
CTTAATAGTG ATAGGACTAT TCAGATTACC TTATTTTATA TTGGTGAGT TTTGGTAGCT TGTGTTTCTC AAGGAAGTGA  
TCCATTTTAT CTAAGTTGCC AAATTTATGT GTGTATAATA ATTGTAGTGA TTCNGTATT ATCCNTTGA TGTCTGTAGG  
GTCTCTAGTG ATATCCTATG

SEQ ID NO:956: (Length of Sequence = 216 Nucleotides)

CCCTATTAAA TCATTAAGCA TTGCATGCAA TACTTTTINCT GTGAAAATTA TTAACCTCCT GGTATATAAA ATTATTTCTA  
GTTATGTTTA AATATTTCCN CTGGGATATT ATCATCTTAG ATCTGTAAAG TGGTACTAAA ATAGTTAAAA ATTATTTNTA  
AGATATACAC AAACAGAAAA ATATAAANC AAATGTATCT TATACATAGT ACTTGG

SEQ ID NO:957: (Length of Sequence = 353 Nucleotides)

TATGTACCAG GTGTGGAGCC TAGAACAGAC ACCAGTCAGA AGTGCAGATA AGGTCTGACT TTCCAGCATA GCCAGGGGAC  
TTGGCTGACT CCACATGTCC CCAGGCTTA CCTAGCTGTA AAGCAGGCAG GTTGTGAAGT CATAGTGGCA GTTTATGAAA  
TATTTAGGGG ACCTAATAAT CTTTAAATG TATAACATTT CTGCATAAA TTTCTTTTCA TGAATCCTTT CATGACTTAG  
ACCATCTATG ACATGCTTGG ACTTTCTGAC TTGTCTTAC CCCCCCTCTC TTTAAACAAC CAGTCITTTT ACTTTAGGAC  
AAGAATTTAC CATACAAGAT TCTTTTGTAT AAA

SEQ ID NO:958: (Length of Sequence = 410 Nucleotides)

AAGGAAATGA ATTTGATAGC AGATTGTTAG AGATTAAATTA CCTATCATAT GCCAAAGCCA CTTCCTACAT GTCAGTGCTA  
AGGAATCCCC TAGAGATGGA ATTCCTAGGT TCAACTGAAA ATTAATTGTA ATTAATATAA TAGGTAAATT CATTGTAAAT  
ATTTTAAAGC CTTTGGCAA TGAGTTAATT CCACAAGATC CACATTGCTT GAAGTGTAC AGAGAACACT TGATGAGAAT  
GINTAGTAA TAAACCTTAA CCTCTGGGG AAAAAATCCT ACTGTCTTTC CTTCTGGCTT CGTTCTTCTT GGAACATATT  
TNGGTGGCAT TTGGATATCT GGAGGACAAA GGGATCCCTA CAAGGTGENT GCATAACAT GCGTGGGCCC AGATGGACTG  
TGCTCATTGG

SEQ ID NO:959: (Length of Sequence = 197 Nucleotides)

GCCCGGCGAC CGTAGCATCT TCTGGACCAC AAAATAGAAC ATTGCCAGGC AAGGCAGGGC ATTTGGGGAA TTINAGAGAA  
AGCAGGATGA GTGATGGAAT TGGGAGGGTG GCACAAGATG TTAAACAGCA TATCTTAGTC CTCTCTAGG GTATAAACA  
GGACCCATGG ACTCTAGCAT CCTGGAATGA CAGAGGG

SEQ ID NO:960: (Length of Sequence = 345 Nucleotides)

AATAAACTTC TGTTGTMTA AGCCACCTAG TTGTGGTAC TTGTTATGGC AGCCTTTGGA AADCAACACA CCGCACATG  
GCGTGTMTA CCGAGGCTGA TACAACCTTA AGAAGGAAT GGNVTGGTC ATCAGCAATC TCCAATACCT ACAGCAAATG

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GGAAGACAGG GAAGGACCAG AGGTGTAGGT AAAGCAAAAA GCCACAGGTC ATTAGGAAGT GATGCTCCAA CTGGGCATGG  
 AAAAGGAGTT TGGAGTTAGG AACACGACAG ATCTGTCTGG ACAAGGNTCC AGATCTCTCC TAGGGGGAAG NAGGGGCAAC  
 TTAGGACAGT TTTGTGTCT GTGGG

SEQ ID NO:961: (Length of Sequence = 327 Nucleotides)

GCTGAAGAGG AACATGTGTC CTCGGCCACT TCAATCACTG AGTGTGACAA ACTTCTCTCC TTGGCCACAT CAGTGGGTGA  
 GGACCAATCT NTGGCCTCAC TTACAGCTCC CCAGACAGAG GAGACAGGCA AGAGCTCCCT GCTGCTTGAC ACAGTCACAA  
 GCATCCCTTC CTCCGTAAT GAAGCTACGC AGGGCTTGA CTATGTGCCA TCAGCTGGTA CCATCTCACC CACCTCTCA  
 CTGGAAGAAG ACAAGGGCTT CAAATCACCA CCGTGTGAGG ACTTCTCTGT GACTTGGGAG TCAGAGAAGA GAGGAGAGAT  
 CATAGGG

SEQ ID NO:962: (Length of Sequence = 369 Nucleotides)

AAITTAGATT TGCAAGTTTT CTACATTTTC AAAACAAAA AACAAAAAA CAAAAACAA ACAACAAGAA ACGTAGACTA  
 GTTGGGCTCT GTCATGCCCA GGACATGAAT CAGCCCTCA TCAGCTTCT CTGACCATTG GTCATTAGT GGTCTTCTTG  
 GTTTTCAGAT AGCAAGAAGG GTGATTACAG CAGGATATT TGACAGAGAC CACATTCACA TAGCTTTTAT TAGTTATTGG  
 TTGCTGTTAA TCTCTCACTG TNCCTTGITA AGCTTTATCA TGGTATCTAC GTAGAGGGAA AAAGCCACGG TATAGATATG  
 TAGGGTTCCA TACTATCCAG TCTCAGGGCA TCACTGAGG GGTCTTCTG

SEQ ID NO:963: (Length of Sequence = 278 Nucleotides)

CTCAAACACC CGAGGCGGG AGGAAAGAGA AGCGATGCT TCAGAGCAGA CACTCCTTAG ATGGCTCCAA ACTTACAGAG  
 AAAGTGGAAA CTGCTCAGCC GCTGTGGATA ACGTTAGCAC TGCAAAGCA AAAGGGGTTT CGGAGCAGC AGCGACGCG  
 GGAGGAGAGA AAGCAAGCCA GAGAGGCCAA ACAGGCAGAA AAGCTCTCCA AAGAAATTN GAGATCTCG ACTCGGCTCC  
 CCCAGCGCCG CTGGTAAAAG AAGTCACCAA GAGGTTTT

SEQ ID NO:964: (Length of Sequence = 349 Nucleotides)

ACACTCTCAG TATAGACAGT CGTGAAGAAC AAGCTGAGG GATTITNAAG TAAACCCATT TTCAGGATGA CTACAATCCT  
 TCCACTTCTA GAAACCTTAG AAGTACAAGA AATAGCTCTA CTACGGGTAA CTGATTAAAC AATTTCCCAA ACACCTTTTC  
 CACTACCCAA GCGGTGGCC CTCAGAGAGA ACCGGGATGG ATTGCCATCT GGGTTCAGAG GCAATATGAG GAGGTTGGGG  
 GGATGGCAGG GGCATCTCA GGGTTGGGG GCAGGCCAAG GGGATGAGAT GGCAAAGGAC AGCTTTNGGA ATCAGATAGA  
 CGATCCAGCG TGCCCTCTTA CACTTGCAT

SEQ ID NO:965: (Length of Sequence = 361 Nucleotides)

AGCAGCAAGC CAGACGTGAC TGTCAGGAAC AAGCTAAAT AGCTGTGGAA GCTCAGAATA AGTATGAGAG AGANTTGATG  
 CTGCATGCTG CTGATGTGA AGCTCTACAA GCTGCGAAGG AGCAGGTTTC AAAAATGGCA TCAGTCCGTC AGCATTTGGA  
 AGAAACAACA CAGAAAGCAG AATCACAGTT GTTGGAGTGT AAAGCATCTT GGGAGGAAAG AGAGAGAATG TTAAAGGATG  
 AAGTTTCCAA ATGTGTATGT CGCTGTGAAG ATCTGGAGAA ACAAAACAGA TTACTTCATG ATCAGATCGA AAAATTAAGT  
 GACAAGGTG TTGCCTCTGT GAAGGAAGGT GTACAAGGTC C

SEQ ID NO:966: (Length of Sequence = 163 Nucleotides)

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CTGCCCTCTG GGTTCAGCG ATTCTNATGC TTCAGCCTCC CAAGTAGCTG GGATTACAGG CATGTGCCAC CATGCCAGT  
TAATTTTGT ATTTINAGTG GAGATGGGT TTCGCCCTGT TGACCAGATT GGTCTGAAC TCCTGGCTC AAGTGATCCA  
CCT

SEQ ID NO:967: (Length of Sequence = 365 Nucleotides)

GIGTCAGTAA TATGTTGAC ATATTATTNC ATCACCAGG TGTAAAGCC AGTNCCTT NCTGCTCCTC  
TCCCTCTCT CACCCCTCTG CTCAAGTCT ACCCNGTGT TTTCTCTTT GTGTCTTAA GINCTTATCA TTTAGCTCCC  
ACTTGTAAAGT GAGAATGTC AGTATTTGGT TTTCTGTTCC TTTGTAGTT TACTAAGGAT AATAGCCTCC AGCTCCATCC  
ATGTTCCAC AAAAGTCATG ATCTCATCT TTTTATGGC TGCATAGTAT TCTGTGGTGT ATATGTACCA CATTTCTTT  
ATCCAATCTG TCATTGATGG GGCATTAGG GTTGATTCCC TGCT

SEQ ID NO:968: (Length of Sequence = 390 Nucleotides)

GTGTATAGTA ATTTAATAGT AATTAAATGT AGAGTATTTG TAAAAACAAG GAGAGGAAA AGAACAATTC ATATTTGAGA  
ACTCTAATA ATCTCTAGA GCAGAGTCA AAGAAGCGT GGTAAAAATA AAGCCAAAGA GATATAGGGG CTAGTCTTAG  
AACCAGGACT TCCTATAGAA CCAGCTTCT ATAGAATCTG AACTTTATCT GAAACTCTT CACAGATCTC CTCACCTTA  
ACTTCCACAA AATAAGAAAT TTGATTTTG AAGGCAAT TGTATATTT AAGGAGCAGG ACAATCTCAG CTGTATCTGG  
GTTTCAGAT ATCCAACAA TCTACCCAA ATCACTTTTC CAGCTGCAGA CTGGAATTT CAGATCCAGG

SEQ ID NO:969: (Length of Sequence = 340 Nucleotides)

CAGACAGAA AAGATTGAA GAGACGGTC AGGAAGTAGC GGAATTACTG GAGGAAGAAA AACTAAGTTG TGTGCCAGT  
CTCATCTTTG CTAATAAGCA GGATTTGCTC ACAGCAGCCC CTGCCTCTGA AATTGCAGAA GGACTGAACC TGCCATACCAT  
CCGGACCGA GTCTGGCAGA TCAGTCTTG CTAGCTCTC ACAGGAGAGG GCGTTCAGGA TGGCATGAAC TGGGTCTGCA  
AAAATGTCAA TGCAAGAG AAATAAAATC TAGACGAATG GAGATGCAGG AGCTTGGGA GCGAATTCG GGCCTTAAAA  
ACACTAATTT GCTGCTTCT

SEQ ID NO:970: (Length of Sequence = 372 Nucleotides)

TTTTAAGATG GGATCTCAG GTTACCCAGG CTGGAGTGCA GTAGTGCGTC ATAGCTCACT GTGGCCTCAA ACTCCTGAAC  
TCAAACTATC CTCCTGCCCTC AGCCTCCAA ATAGCTGGGA CTGCAGGCAC ATGCCACCAT GCCTGGCTAA TTTTAAAT  
ATTTGTAGA GATGGGTCT CACTTTGTTG CACAGGCTGT TTGCTTGATT CTTAAGAAAG TATAGGGATC CAGCTGTACA  
GAGCTTCTG CAGTCTTTG TAATAGAATT AGTTGTTAA ATTGTACTTA TTACATGAGG CATCAAAGAC CTTGGAATAA  
AGCTATNCC TCACATATCT GGGCAATAT TTTGGACTTA CTATGGTTAC CG

SEQ ID NO:971: (Length of Sequence = 337 Nucleotides)

GACTATAGAG AACGCTGAAG TTTTGAATAA AAGACTCTAG GGTGAGCTTC ATCAGTGCTT GCTTTGGNCT CAAGATGTAA  
TGAGATTCTN CTTTCAAGTC AACAATTGCC GCAAATNCTT TCACCTGAGT GGAGCTGGGA GCACCCAGTC TCTCTGCATA  
TAACCAAAAC AAATTTGAAT CAAAAGGTA GATGTTGAGA GTCTGTGTTG TTCTGCAGCT CAGGCTGTG AAGTTGTGC  
TAGTCATGTC CACTTCTGGA AAGAGGATAC CTGINCTCT CAATGTGAGG GAACGGGAGC TTNGGGGCAT CAACCTCACA  
TTTTCTCTC AAGGGGA

SEQ ID NO:972: (Length of Sequence = 396 Nucleotides)

TTCTTTACA TCAAATATCC TCAATGGAAG AGGGGATATT GCACACAAAT ATCATAAAAG CACTACATAT TACTTTCACT  
GGAACTAAT TTNTACATT AGATATGACT GGATAGGATA GAAGTGATGC AGGATTATAA GACATAATAC CATAACAGC

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TGCAGACTGA CACAAACACC ATTCAGAACA AGAGAGAGGA GTGTGAAGTG CTTCTCAGCT GGGCTCAAGA CCACTTCTTT  
CCAGTGCTGG AAAGAGGGGC TGCATGCAGT GTAGGAAAAG CGTGTCTCTG AACTGCCACA GGGTGTCTC GAAAGGGCAG  
CCCGGTCTTG ATGCCACTTC TCCATGGCTC CTGTTTTTGG GGGAGCTCCA AACAAGTGCA GAGAAGCTGC CTATTT

SEQ ID NO:973: (Length of Sequence = 401 Nucleotides)

TTCTCAAAC TCCAGTCTC TTCCTGGGCC AAGATCTGGT CCACCACTGC CGTGGCCTCC TTCCCCTGGC GGATGTC TC  
COGCTCCTGA GCAGAGAAAC TTTCTTCCC AGCAACTTCT TCATCTGATG GGAGGAGGGA ACTGAATAGC TTTCCCTTA  
GGGAGATAAG AAAGAAGAGT GTGGTGTGAA CAGGGAGCTT TGAGCTGTGG AGTTGGGCTG GGCATGGAAA ATNCGGAGCA  
GAGTAGCAAG GAATGAGGGG CTTAGAGAGAA CTCTNGGATC AGCCCTCCCA CACTCACTGC CCTTTAAGGT ATCTTTGGGG  
AAAAAGGG GCTTCTATGA TGAGTCTGGC AGCTNCCAC ACTGCATTCT CCTCTGCAT TTTTTTACCA TGCACCAGGG  
C

SEQ ID NO:974: (Length of Sequence = 371 Nucleotides)

TTTACAAATG AACCACTGAG CACCTCAGTA CTTAGCTCAT ACCTCATACC TTAGTTCCTT AGTACTTAGC CTTGTGCCAT  
CTTGAATGAG ATGGAGTGAA GTGAAGCTCG AAGGAGTGAC AGAGACATAG TCCTTGCTCT CAAGGGGTCT TTAGCCTGGT  
CTGGGGGACA AGATTTCTC ATCTACCTCT TGAAGGTGG CAGGACAACT CCACACTGGA GTGTTCTCAC CAGCAGATAG  
GTGCTGCGGG AGTGTGGGCG CACATTCTTT ATAGCCACAG GCTTTCTGGG GACTINCCCT GGGGTCTTC CCTATTGGC  
TGGGTGGACC ATAAGCGCA AGTGAATGTG GCAAACTTCA ATTCACAATT AA

SEQ ID NO:975: (Length of Sequence = 340 Nucleotides)

GACAACAGAA AAAGAAGTGG ACAGCTACCC TAGATTCTAG CTCACACATA ATTCAGCCAG ATAATCATCA TTAAATAAT  
ACCCCTTGAA ATTTTTCAGA CTTTTCACAG CTCTAAAAAC ACAACATCAG ACATAACATC ACACATTGT TCCAAAGGAC  
TAAAAATCAA AAGCAATTGC AAGTATTGG GAATCACTTT TATGCTTTC CTAAGGGACA GTCCCCATCT TTCCAAGGAG  
TGTTTTTAAA GAAGCACTAA CTCGGTAGG TTATCAAACT ATTTTTFINAT TCTAAATAAA TAAAGACTA ACTGAAGTTC  
TCAGGTGCAC ACTTATTTTT

SEQ ID NO:976: (Length of Sequence = 343 Nucleotides)

CTGTCCCTTA AATATTATTA AAATTTTAAA AATTAGACAT TTGGTCTAAA TTAGACAGGT AAGATACTAC TGCTCTTACT  
AGATGCTTAA AAGTCATAAA CTGCTTCTAT GGCTTTINAT AATTGINCAA CTTGCTTGCT TTAGAGCCAT TGGATTCTAG  
GTAAGGCTTA GAGACATTG GAGTTAGCCA TGTCCTCTAG CTATGCTAGA AAGAGTCCGA CATTATCTGT GGTCTGTCC  
TGTATCTTAC ACTCTACACC TGATACATAA TTAAATTTAC TTACTATAA AATAAAATG GATGCATTTT TTAGGTAGGA  
AGGGTATGGG AAATTATAGG TTT

SEQ ID NO:977: (Length of Sequence = 265 Nucleotides)

ATCTTTGTAA TATCAGTGCC TAGACTAAGC CTGGCGTATA ATAGGCACTC AGAGATTGA AGAATAAATG ACTAAATGAC  
TGTATCAAAT ACTTGCCCAT TGTGTCTGT TTCTGANTTG TACAAGGCCA TCATGATAAT TGATGATCTT AATAATGTGA  
GAATATGATT CTNTTACCTT AGTAAGAGAG CCATCAGTTT ATTGGATGAT AGTTATATGG AAAAAGAAGA AATGCTACTG  
TGATAAATAT TTATAATTTT AAACA

SEQ ID NO:978: (Length of Sequence = 285 Nucleotides)

ATGGTGGGCT GCCTGGCCG AGGTGGCCAA GATGGCACCT GTTCTCTGCC TCANAAGAAA AGGCACTGAC GCACTGACCC  
TTNAGGTG TNGGGTGT GGTCACTGCC CTCCGCTG AGGTCTAGT CTCTTTTCA GTCACCTCA CCACACCTTA

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TTTAACCAATT TTTTNTTCCC TTAAAAAAA AAAACCCAAA AAACCAAATC CCAATAAATA TGTATTTTTT NTCCATCACA  
ATATTGCTTT AGAAAAATAA GAGCCGTCAA GCAGCAATTT TTCCT

SEQ ID NO:979: (Length of Sequence = 316 Nucleotides)

GTGCGTNCAC ACTCTCCTCC TGCTCCCCAA ACTCCTCATC ATTGAAGCCG AAGTGGTCAA TGAAGGCAGA GGTCAATCGC  
TGCATCTGGA AGTCCATGAA GGCTGCTGC AGCACAGCCT CCTCAGGGAA GTTGAATCC TTGAGCCGGT CGTCTCATC  
GTCACTGGAG GAGTGTAGGT GGTGGGTGTT CACCAGGTCC ACCATGTTCT TCTGTGTGGT CTCGCCAGG GGCCCGATA  
CGAAGGCTC CCACTGCTCC TGCTGCTGCT TGGGCAGCTC CTTACAGCAG TGGCCGAGC TGCTCTGCAA TTGGGG

SEQ ID NO:980: (Length of Sequence = 386 Nucleotides)

AAACTGGCTT GCCTTCATCA TCTCTGCAGG GNTCAGTAAA GATTAGAAAT GGATTATTTA CCTGTGTATA CAAATACACC  
TCTCCCTAC ACCCAAGANT TGAGAGGAAG ATGAGCTGTT CCTGTGTATA CGCCTGANIC AATCCCATTA TCTGCATTTT  
TGTTGTGGT TAGCGCTCCA GCAGCCTAAG GCGGGAGCTG GAAATGACAG CCTTGGAGAC GAGGAAGGCT CCAGGGAGGA  
CGGAGAGGAA CACCTGCTGA AGAATAAGAC GGGCGGCACC AGCCGGGCTG ATTTTGGGGA ACGGAAGGTA ACAGAGGGTG  
ATGCTTCTAA TCGCTTTTAC AAGGTCTTGG AAAGACGGGA TNGCCTAAC CAACTTGGGG TTCTT

SEQ ID NO:981: (Length of Sequence = 322 Nucleotides)

GTTTATTAAAT ATTTAAACAT ATTAAATATA TACATGTCNA TAATGAAAAT GAAACATTAC AAATAAATAC ACAGGAAGG  
CAGTATCCC CTTCAGTTC CACTCTTGAA ATAACCAGTT AACAGATGA TGAACATCTT TCCATGATGT TCTCCAAGAT  
TCATATTATT TTTGCAATCA TACAATGGCA TATACAGCTC AGGTGCGGTG GCTCACGCAA GTAAATCCCA GCATTTTGGG  
AGGCTGAGGC GGGTGGTCA CCTGAGATCA AGAGTTCGAG GCCAGCCTGA CCAACATGAA GAAACCCGTG CTCTTACTAA  
AA

SEQ ID NO:982: (Length of Sequence = 305 Nucleotides)

CCCAAGGCTG TAGTTCAGCA TCAACAGGSC AGGGAGCTTG GCAGGGCAAG GGCAGAGCTG GAGATCATGC CCAGTNTTCC  
AGGTGCCCTC CCTCCCAATC AGCCTGGGGG GCACAGGACA GGGATGGAGA AGGGGCTCTC TCCATGGCTT GGGTAACATG  
CCAAAGGCAG GTCATAGGSC AGACTCAGTG GGGGTGGGGG CCTGGCTAAC AAGCAATGGA GAGAACGGGG GCCATCCAGA  
GAGGTGGCA GAAGAGAGCC CCTGGGTCAA GAGAAACTT TGGGAAGAC AAGACACGGG AGAAG

SEQ ID NO:983: (Length of Sequence = 399 Nucleotides)

AGCCCTTGTT TTGTTTTTAA AAGCTGTGTT GTTACTGCTT AAAGTCTCCA AACTGTTATT GAGAACACTG ACCAGAGCCC  
TGTCATAGA CCAGTGTATT TCCAAGTGCA GATTGCAACT CCTTGCAGA GTAGGTGTG GAGCCATTIN AGCTGACTAC  
TCACCAGCTT TCTTCAAAT GTAAATGGAA TAGGATAGAA AAATAATGAA AAATTGTAAA GTGAATTGGA TGCAAAAAGG  
GTAAATATTG TNGTGTGAGA CTTTTTTGGG TGAGTGTGCA TGTGTTCACA TACTGCTICA CATTATAACA TGTATTGCTC  
ATTATGGGTT GTGGTCAGAA AAAATTCAAG AAACGCTGTC TCAGACTGTC CCCAAGTTGT ATTTGCTTAT AATGGGACT

SEQ ID NO:984: (Length of Sequence = 408 Nucleotides)

GTGGTATGAG GTATCAATGA AATACATTTA AGATGTACAT TGGTTTGTIT CAGAAAGGCG AGACAAGTCA AAGCGGGGAC  
TTCCAGGCTA TAGGTAAATT TATACATTTC CTGGTTAAGA TTGGTTGAGT TTGTCTAAGG ACCTGGGATC AACAGAGAGG  
AAATGTTTGG NTAAAGACAA GGATTGTGGA GACCAAAGTT TTAAGTACGA GAGGAGCTC TTAGCTAGCA GGCATAAGAC  
AGAAGAGGCT GTAAATGTT TTCTTATGAG ACTGAAAAGG GTGCCTGACT CTTAATTGAT TATCTCCTGG NTCTGGAAAG

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AAAAAAAAA GGAATGGCC AGGTGCGGTG GCTCAGGACG GGTCTGGTGG CTCACACCTG TAATCTTTCT TAAAACGTTA  
TGAAGTTC

SEQ ID NO:985: (Length of Sequence = 439 Nucleotides)

TGGTATACIT TTGINTTTTT TTCTACTTGT TAGTTGTATT AGTATCAAAT GGCATAATAA AGTTACTTTG TTGCCATTT  
CCCACTCATC TGAAAATCAC AAAAAGCATT TATTTCTAAG ATTATATACC ACTGACCTTT TCCCCAAAGT TATTTTCCIG  
TTACTTGTAT TTCATCTTTG CCCTTATTTT TTTAATATTT GTATTAGAAT TAGCTTGCTC TTGTTTCCTT CACGGCAAAT  
GTGTACATT GCCCACTGGG TGGCTTCTGC GGATGCCCT ACCCACCCT CGTCTGGAGC AGAGAAGTCC TGTTAGCCTA  
GCAGCATAGT GGCTGCTGTC AGTGCAGGA GTGTGCTTC TCTAGCATGG TCTGTGATGT CATCTGGACA TAATTAATTA  
GACTAATCCG AATAGAGGAC CAAGACAGCC CTGCCTGCG

SEQ ID NO:986: (Length of Sequence = 286 Nucleotides)

CGGCGACGAA CATGGAGAA TCCAGCTTG GAGCGCAAGT CCTCTGCGG GAAGAAGTGT CGGGCTCCA GGAGGAAGTT  
CACCTTCTCC GGCAGATC AGATGTTG GGAAGGACC TGGAGGAGTC GCAGGGCGGC AAGTCTCTCN AGGTCTCTC  
GGCCACCGAG CTCAGGT CTGGCCCA GAAGGAGCAG GAGCTAGCCA GAGCCAAAGA AGCCTTNCAG GCCATGAAG  
CTGATCGGAA GCGCTTA TCGAGAAGA CAGACCTGCT GAGCCA

SEQ ID NO:987: (Length of Sequence = 381 Nucleotides)

TCCAAAGGTT TTCATCTG TGGATAA ACAAAC TG GTACATCTAC ACATGGAAT TTGGGA GATGAAACAG  
AATGINTGAG GGCACAT CATGTAT GTG TGG GTCTGCCTCC CATTCTCCA CAGGCA GTGTGCT  
GGGTGAGGG CTGGGAG GGCAGGAG CATCTAC AAGGGTGGAA GCGAAGA TCGACCAG TCGCAGGGT  
GINTCACATG GTACAACCA GAGACTTGGC GTGCTAGAA CCAAAGAAAC ACTCAGGACA CACGACAT CTGCAGGGAA  
CCTGGGGGT GGTGAGGAAA GTCGTGCACG GGTGTTGGG GGGAGACTTG GAGGCCCTC T

SEQ ID NO:988: (Length of Sequence = 381 Nucleotides)

GAATTAATAC CAATAGAAGG GCAATGCTTT TAGATTAAAA TGAAGGTGAC TTAAACAGCT TAAAGTTTAG TTTAAAAGTT  
GTAGGTGATT AAAATAATTT GAAGGCGATC TTTTAAAAAG AGATTANCC GAAGTGANTT AAAAGACCTT GAAATCCATG  
ACGCAGGGAG AATTGCGTCA TTTAAAGCCT AGTTAACGCA TTTCNTAAC GCAGACGAAA ATGGAAAGAT TAATTGGGAG  
TGGTAGGATG AAACAATTTG GAGAAGATAG AAGTTTGAAG TGGAAACTG GAAGACAGAA GTACGGGANG GCCTCCTTCA  
TGTTTACAAT TTTAATTAAT TTTTTTATT TTAGGNGTAA TTTCTTACCA AACATTACCC A

SEQ ID NO:989: (Length of Sequence = 432 Nucleotides)

GTCTGGGCT CTGCAACCT CTGCTCTCTG GGTTCAGCG ATTCCCTCTC CTTAGTACC CAAGTAGCTA AGACT 3  
CATGCGCTG ATGCTCTGGC TAATATATAT ATATATTTTT NTAGTTTITA GTAGATACGG GGTTCACCA CGTT 3  
GCTGGTCTCG AACTCCAGAC CTCAAATGAT CTGCCCGCT TGGCTTCCCA AAGTCTGGG ATTACAGGCA TTAGCCACTG  
TGCTTGCCA ACAATATATA TTAATAAGC ACACATACAA CAAAGTAGG TGTGTTAAG CTTACAAAAA TGTGACCACT  
AGCTTGTCTGA AACCTAAGTT TTTATTTGTT CATGGAAGTT TCTAGACCGT AACTACACTG AATAATGAGA ATCTGCTGTA  
ATCTTTTITA GGTGCTGTAG ATGAGCCATT GG

SEQ ID NO:990: (Length of Sequence = 421 Nucleotides)

GGCAGCCCTA CTTTNTCTC TCATTAGCAG TTTCACTCCA CAGCTGGGT ATTAAATTTG TNAGTCATTG AAATTAATCC  
CTGACTGAAT TGGAAAGGAA TTGATTTGTC AGTATTGGA TTTATTTATT TNCAGGTAT GGAATCTGG TGATTTGAA

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AACATGAATG ATACCATTTT GCAGCAGCAT TGTAGATTTG TAGTATTTTA GATTGGTATC ACAGTGCACC TGAAAAGTAA  
 GTTTCATTTT ACTTTTTTNA TTGTTGTTGA GACGAGCTC ACTTTTGTCA CCCAGGCTGG AGTGCAGTGG TGTGATCTTG  
 GCTCATGGCA GCGCTGCGT CGCTGGGTTT AAGCGATTCT CCGCTCAG CCGCCGAGT AGCTAGGACT ATAGATGCTC  
 GCCACCATGC CCAGCTAATT T

SEQ ID NO:991: (Length of Sequence = 351 Nucleotides)

CCTCACTCCC CGCGCTGGCA CTCAGGTTT ACAAGAAGAA CTAGGAAATA ATGCCGGCCA CGCGACCCCT GGAGAGGGGG  
 COGGCTAGAA CAGCGTTCTT AAGAATCCGC GCCACAGCAG GTCCCGCGAT GTTGGGGCCT TAGTGTTCATC GAGCTAGCCC  
 CAATCCTCAA CCGGATCTTC AACTTCTGGT AGTCTTAACA GAAGTCTCGT ATTGAACCAG CCACTNIGGC CAGGGAGAAG  
 TAATCCTCTG ATAGTTGAGG TTCTTINCTC TCCTCTGGAG CAGATAGTGG TGTCTCTCC CCACAAAGCT CATGTTCTGC  
 TGGAGAAAT GGAGATGGCG CCTGGAAGG C

SEQ ID NO:992: (Length of Sequence = 406 Nucleotides)

CCAGAAAAA TGGCCACTAC TACCCTTGG CTCAGAAATG CTAGTCTTTA TTINCTGAAA TGTTTTATAT AGAAAAAATT  
 TAATAATAAA TAGACATTCT TATATATTTC CTTACCATTT NAGATTGGGT TAAAAAGTAT GNGACTTCC GCGGGGTGC  
 GGTGATTCAA CCGTGCATC CCAGCACTTT GGGAGGCCGA GGCAGACAGA TCATGAGGTC GGGATCTGTG GCTAACACAG  
 TGAAACCCCG TCTCTATTAA AANTACAAA GGAATTCCTG CAGCCCGGGG GATCCACTAG TTCTAGAGCG GCGCCACCG  
 CGGTGGAGCT CCAGCTTTTG TTCCCTTAA GTGAGGGGT AATTTCAGC TTGGCGTAA TCATGGTCAT AGCTGTTTCC  
 CGTGTG

SEQ ID NO:993: (Length of Sequence = 381 Nucleotides)

ATGGAAGGAC CGTGCCGGGA CCCCAACGAG GCANTGCGG AGTTTGCCAA GGAAATTGAC ATCTCTGTG TCAAAATGA  
 GCAGTGATC GGAGCAGGG AGTTTNGGA GGTCTGAGT GGCACCTGA AGCTGCCAG CAAGAGAGAG ATCTTTNIGG  
 CCATCAAGAC GCTCAAGTC GGCTACCGG AGAAGCAGCG CCGGACTTC CTGAGCGAAG CTCCATCATG GGCCAGTTG  
 ACCATCCCAA CGTCATCCAC CTGGAGGGTG TGTGACCAA GAGCACACCT GINATGATCA TCACGAGTT CATTGAGAAT  
 GGCINCCG GACTCCCTTT CTTCGGCAA AACGATGGC AGTTTCACAG TTCATCCAGC T

SEQ ID NO:994: (Length of Sequence = 384 Nucleotides)

GTTCCTCCAG TTGGGAAGGA TAAATCAAA TTCCACTTT CTGGGGTGA TGCCCAAAC CTTCACAACT CAAGTGTCT  
 CCAAGTGCAA ATGTCAAAAT GGGAGGAGGA AAGGGTTTAA AAATTAGAGA AAATGTATG CACTTACGGA CTAAAAATC  
 CGAAAAACAT AGTAAAAAGA CAAAAAACA TAGCATTATG CTCTGAAATC ACAACCAAG CCAAAATAAA AGGGACATTT  
 TTCACCTAAA CTACCTAGAG GGATTTTTTG TTATGTTTTT CTTTTTCTT TTTTTTTTCA TTTTCCAGTT AAGTCTATG  
 TCTTTNGTGA AATTCCAATA CTAAACTGC AAGTCTGCAA TGTCTCTGA AGTCAGTGA ATTA

SEQ ID NO:995: (Length of Sequence = 386 Nucleotides)

ATAACTTTAA CAGAGGATG GAATAATGAG GGATTTGCCA GGAAGCAGTA AAAGGGAACA CTAAAGTATA GAATAATAGC  
 AAACAGAAGG AGCACCTAC CCTAGGGCT GAGAAAGAGC ACAGGGAAGT CCTTTTTTNT TCCTGGACAG AGATCCAGAC  
 GAGCTGGAGA AAGAAGTTC TATGGTACTG CATCANTGGA ACTTGCTGGA AATCCACCCT CAAGGSCACT AGGAAAACCT  
 GTTCAGGGGA GCTGTGGAGG GAAATGGGGT TGGCAGGAAA GCTGCTGGC GGGGGTGCT TCAGACTGCA GTGTATGCA  
 GGAGCTTGG CACTGGGGAA GCTGTGTGCA CTGCAGGATC CTGCTGAGC AGCACATCAG ATCAGG

SEQ ID NO:996: (Length of Sequence = 307 Nucleotides)

GTGCGCCAAC TGCAAGAAGG AGGCCATCTT TTAGTGCTGT TGGAACACCA GCTACTGTNA CTACCCCTGC CAGCAAGCCC  
ACTGGCCTGA GCACATGAAG TCCTGCACCC AGTCAGCTAC TGCTCCTCAG CAGGAAGCGG ATGCTGAGGT GAACACAGAA  
ACACTAAATA AGTCTCCCA GGGGAGCTCC TCGAGCACAC AATCAGCACC TTCAGAAACG GCCAGCGCCT CCAAAGAGAA  
GGAGACGTCA GCTGAGAAAA GCAAGGAGAG TGGCTCGACC CTTGACCTTT CTGGCTCCAG AGAGACG

SEQ ID NO:997: (Length of Sequence = 402 Nucleotides)

TCTGCACCTA ATACTGAGGG TGTGAAATCT TCCTCAGTAA TGCCAGCCC TAGTACCACA TTAGCGCGGC AAGGCAGTCT  
GGAGTCACCG TGCTCCGTA CGNGCAGCAT GGGCAGTGCT GGTGGGTAA GCGGCANAGC AGCCCTCTCT TCAATAAACC  
CTCAGACTTA ACTACAGATG TTATAAGCTT AAGTCACTCG TTGGCTCCA GCCCAGCATC GGTTCAGTCT TTCACATCAG  
GTGGTCTCGT GTGGGCTGCC AATATGAGCA GTTCTCTGC AGGCAGCAAG GATACTCGA GCTACCAGTC CATGACTAGC  
CTCCACACGA GCTTCTGAGT CCATTGACCT CCCCCTCAGC CATCATGGCT CTTTGTNTT GGACTGACCA CAGGCACTCA  
CG

SEQ ID NO:998: (Length of Sequence = 304 Nucleotides)

GCAGTCTGT GATTGTAAAG ACTCACAACC ATGTGGAGAG GCGAATCAC GCAGGAGAGC CAGCATTGG AGTACCCCTGG  
CTCCAGCCC CTCCCCACC CGTNTTGAG CCAGAGAGCT ACAAGCAGGA ATCCAGTGC AGCTGCAAAT NATGGCCATC  
GAGGAAGTCT GTGGAGAAGA GGCTGGGGC TGTTGTCTG AGGGGGCTA GGCTCAGCAC GGGACCACCT GACGACAGCT  
CCCAGCCAGT CCATGCTGTC CAGGTGGCCA TCAAGCCAGG TTCCAGGGCC CATGGGTGCT TGCT

SEQ ID NO:999: (Length of Sequence = 321 Nucleotides)

AGAATGGTTT TGGAGCTGA NATCTTCATG GGTAGACTT GCTGGTCAGA CCCAGGAGCA CCTGTGGCTC ACACCTTCTG  
TNCCTCCT GGCCTGTGA GAATGTAAAC AGCAGACTCA TACTCAATGG GCACTACAGG CCTATCAGA CGTTTTATAC  
AAGCCTGGAT TGCTTAGTAG GGAATAAGG CATTCTCTGA GGGGCTTTC CACTTAGATT GAGAATTTTA TTTGAAAAGA  
ATCTGGTTA AATGGCATG TGTCCGAGG TAGTCTCTT CCCCAGTGA AGCTGAGCCG AAATATAAGA ATAATATATT  
T

SEQ ID NO:1000: (Length of Sequence = 253 Nucleotides)

CCCTAGAGGA TTGCGCTCT TTNATCTGCC AGTGACCTGA ACCACGAGA TTTTCAAGC AGGAGGGCCG ATTGGGCAAC  
CACAGCTCCC GTGCTCTCTC TTGCACTGC GCGCTTTCC CTCGAGAAG GACTTTGAGG ACTACATTAG GTACGACAAC  
TGCTGTCCA GGTGCTGGC GCGGTGGTC TTGAGCACC CCTTCAACCA CAGCAAGGAG CCCCTGCCN TGGCGGTGAG  
ACGTGCGGCC GGG

SEQ ID NO:1001: (Length of Sequence = 164 Nucleotides)

AAACAGAGTA CTGGGATGTC ACTGTTGAA AGTGCTACA ATTTCTCATC TAAGCGAAG TTGCTGTNC TCCTCCTAC  
CTTACAGTT TCTACTGCC TGAAGGCAGC TGCCAAACC CCTTAAGCA AGCAGCACTC TTACCCACCA AAATCTATGA  
CCTC

SEQ ID NO:1002: (Length of Sequence = 262 Nucleotides)

ATATCTTCT GAGGAAAGT GGTAGAGTA AAGAGGGCAT AGAGAGCGCA CTCATGCATT TACAACCTAG AATTTTAAA  
AAAGTTTACA TTTGTGCTT TGTACTTCAG ATGAATTINC TTATTAAAG AAATAAGGCC ACAGAGGTAA ACTTAAGTCT



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CCTGTTTCCC AATGCCTACC CTCCTTCTTC TCCTTTCTTC TTCTCTTTTC CTAGAGAAAT CCTGCCTTCC TTTCCCTTCC  
CAGAGGCAAC TGGCATTATA AT

SEQ ID NO:1003: (Length of Sequence = 267 Nucleotides)

GGAAAGAGGA GCAGGTCTGG AGGTTTGTGG AACCCAGTCC CTGCAGAAT CTGTAAACC TAATAATCA TGGTTGTGGC  
CATTCTCAG GTGGTGATTG TAATTAGACG ACCCCCGGGA AGCCAGACA CTCGGGGCCT GGAGTTCTTC CCCCTGCCTG  
ACCTAGAAGC AGAACCGTTT TCAGGCTTCT GCCCTGTGG CTTAAGGCT TTGTCTTAAT TTAAGGAAAA AGATCCTCCC  
GGGTTTTATT TCCTCTTTTC TTGAGTG

SEQ ID NO:1004: (Length of Sequence = 277 Nucleotides)

GGCTCCTAAA CACTTCTTC CTGAGATGTT AAGCAAAGTA ATCATCCTGT CACTAGATAG AAGCGATGAA GATAAAGAAA  
AAGCAAGINC TTTGATCAGT TTACTCAAAC AGGAAGGGAT AGCCACAAGT GACAACTTCA TGCAGGCTTT CTGGAATGTA  
TTGGACCACT GTCCCAAAT GGAGGTGAC ATCCCTTTGG TGAAATCCTA TTTNGCACAG TTGTCAGCTC GTGCCATCAT  
TTCAGAGCTN GGTGAGCATT TCAGAACTAG CTCACCC

SEQ ID NO:1005: (Length of Sequence = 271 Nucleotides)

GTTAGGTCAT TCACACATGG TGGAGACAGG AATCTACAGA CTAGGGATCA GCCCCAAGGC TATGATCTTT GINCTGCGCC  
GCTCTACCCC TGAGCAGACG GGCCAGAGGT CCAGAGAGGG CTGTGCTGGC AGAGTTTATA CTTTGATAAC TGAACCCCTAG  
AGTAAGCCTG CCTCGGGAAA TCCAGCTCA AGGGACTGAC AGGCATAATG CTCTTTGGGA GAGAAATGCC ACATCTGCAG  
CGACACGAT CCTAACACT GTCCAGGAC T

SEQ ID NO:1006: (Length of Sequence = 336 Nucleotides)

TATTTTNCAG ATATGGATAA AAATTGCTTA GGAGAGTAAA GAGAGACAAA GTTGAAAGCA GGTTTATAGT AGGTGTGTGT  
TTAGTGTTGA TCCTTTTGTG CTCCAATAAT CAAAGTGATA AATATTGAAA ATTGATTCAT GCAGCATTAC TTAATCCATT  
CTAATTTTNA TATATGTCAA AAGTGCCATC TCCCAAAGT TGCTATCCCC TTCAGGAGAA GAGACTCTGC TGAAGTTTAT  
AAGGTTGACA TATTGCCAGC TTCAATAATG TAAAGATGAA GTGTATACTG GAATCTTAA TGCAATAAC AACTCTTTTG  
GGAAGTAACC CCGTTT

SEQ ID NO:1007: (Length of Sequence = 355 Nucleotides)

GGCAAGAAGG CGTGGGCGGC GCANTGCGGA TCAGAAGGA CATAAACGGC AGCTTGTTC TCAGGCTGG TGGGCTTNGT  
GCCCTCGGCC TTGGGATGCT TATCACAGTC CTTGGGACC AGAACACTGG ATATCAGTNC AGCCTCTGGG CCAGCTTCAG  
AGGCTGTAG AGCATCATG CTGCTGTGGC TGATGCTTCC TTCTCTCAGT AAATCACAAA AGTCGTGTG GCCATCCAGG  
TTACOGAGTG ACTTAATTTC CAGAAAATT AATATTGAGG TCATTATTGT ATGCATTTTC ACTGTGCGCA TTTTGTATC  
CTGTAGGTA GGTCTATGAA GTACCACTGG GTCA

SEQ ID NO:1008: (Length of Sequence = 269 Nucleotides)

ATATTAAAG AGAGCTTTGG TCAGTAAAG TATAAANCT GAGCTTTGGT AAGGTACAG TTTATAAGGC CTAGAGAACA  
TCAAAACATT CATTTCATAT TGAATGTATA AATACCCACA TGTGAGAGCA CATGTTGATT CAGTTTGAAT ATGTCCTGCT  
TGTTGCTT TAAACCTTT CCAGCCTGGG TTAATTTCCC AAGCTTTCTT TATAATTACA CCAGGGAAAG AGTTACCNGG  
NATTAATCAA AACAGACAG TGGACAATG

SEQ ID NO:1009: (Length of Sequence = 295 Nucleotides)

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GATAGCAGCA ACATAAGTTT GTTTATTCAT TTGCTTACTT ACAACAAACG TTTATTCATT ATTTATAATG CAACAAGCAT  
 TAACCTAGGT GCTAAGGAGA GAAAAATGAG TAAGACACAG TTTCTTTCCCT CAAGGAAATC ACAGTCTGTT GGCAGAGATA  
 AGTAGTAATG GTGCCAATA TAGGTAACAC TTGCTACCTG CTCGAAGAAC AAAGTTAAGC AAGTGATTAA GTTAAGCAAT  
 GCTTAGAGGT AGAGGATGTA AGANTGGCCT TAAAAAATGT GTCTTCTGAG ATGAG

SEQ ID NO:1010: (Length of Sequence = 356 Nucleotides)

GTATTTCTCTC ATTTGTGCAA ATNAAATAGA AAAGGTAAAT NAGAAACTCA AGAGGTTTGT TACCTACTGT CAATGGAGTG  
 GGGAAAATGG GTGGAAAGAA GAAGGCAATA AGAAAAGAGT AACAGGAAAC GACAGTNGAC ACTTCTGAGT ATACCTTGTG  
 GAATCTCTTT CACTCTTAGA ATCATAGTAA TAGANGANGA AAAAAGAAGT CCCCAACTG AAAAGGATAG ACCACTGGAA  
 CAACTTCAAG TGGTCTAATG TAGAAGCAAA TGGAGTCCCT CAAGGAAAGA AGAGAGGTTT TGAAAAGAAA AAAACATTTG  
 AAGAGTTAAC AGCGAAACAC TTTCCAACT TAAAGG

SEQ ID NO:1011: (Length of Sequence = 315 Nucleotides)

AGAGAGACAC AACTGTAATA GAGACACAGA GGAGTGGCAC ACAGAGACCA CCTCCAGCT GGAGACAGTC AGGAAGGACT  
 GAGGGAGAGG GGACAGCCAG GGCTCCACAC CCAGGCAAGA ATGGGGGAGG GCCTGTGGAA CAGAGAAGTC ATCAACACAC  
 ACAGTTCAAA GTCTACCCTA GGCTAGGAGG GGGAGCAGGA AGAAGGGGCA GGGACGCAGG GGCCCGGCTT GCNAGCTCCC  
 TGTGGCCTC TNCGCCCCC TGCTGGCTCC CNCTGCGGTG CTCAGGCAGG AAGAGAGGAG GCTGCTGTTT TTAGG

SEQ ID NO:1012: (Length of Sequence = 272 Nucleotides)

CCCAACTCTA TAGCCCTAGT CAACCACTAA TCTATACCTT GTNCTCTATA GATTTCCTA GTCTAGAAAT TTTGTATAAA  
 TGAAATGCAT GCACITGAAC TTTTGTATC TGGCTTGCTT TTCCATTTAG CATAAAGTTT TAAAGGTCCN CATATGTTGC  
 TGCATGTGTG CATTTCTTTT TGTGNACTGC NATATTACAT TGTATGGGAT ATACCATTTT GCCATATTIN GTTAAATCCA  
 TTCATCCAGT TGGTGGGACA GCAGGTATT TC

SEQ ID NO:1013: (Length of Sequence = 252 Nucleotides)

TTTGTTAGTG TTTTCTACAC TACTCTCAAG TTCATTGAGC ATGTCAATTC AACACATGT GACGTGTCAA CTTCAAAAAT  
 TAAACAAACC AGCNAAACAC AACACTTGNC ACTACAAAGG AACTTGTTTT ATTCTCAACC TTCTATGATA GCTAAACTTC  
 TCTGNAATTT NGTTCCCCCA CACATCCAC ATCTGGGCTC AATTTCCAGC TTCIGTINTT CTGTTTTATT TCATCCAAA  
 TGTATTTTA AT

SEQ ID NO:1014: (Length of Sequence = 210 Nucleotides)

GGGATACACT GACAGTAATG TGAAGCGCCA CACTTGCGA TTTCAGGCCC AGCAGGTCTT GGNCAAGTGC CATTCCACCC  
 GGAACTTTTA ACCCAAGCGG TGGGAAGGA AAGCCAAAAC TCCAAGCTGG CACTTTTTTG GGGTCTGGG CCATGACACT  
 TCTTAGSCCT TCTGCTGCTG AACTTTTACA GGGACAAAAG GTACCCCAAG

SEQ ID NO:1015: (Length of Sequence = 222 Nucleotides)

GGNAAGAAAG GTTCTCAGA GGACAGCCTT ATTAATTCT CAGAGGATGA ATTNAGCAA TGGCAGCAG TTGCAGTCAC  
 AACTTCTTAA GGTCTTCAG AGGCTGATTG TTCCTAGNAA CACAGAGTAA TGAATATTC CTGAAGAGCA ATGAAACAGG  
 TTTTGAATTT TTTGTATCT GNACTTAGNA ACACATCAGT CCCCATCAAC CCATGGACTT CT

SEQ ID NO:1016: (Length of Sequence = 236 Nucleotides)

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GAATAACTG GTTGGGAACC AGAAAAGTAC AAAAAAGAAC AGCTAGAGGT ACATAGACAC AGGACAATTA ATCAATTTGG  
GAAAAAAGAA AGNACTTACT TTCTCCATTG CTGCCTGAAT TGTTCCTCAA TCTGCCTGA AATGCCACTT TTGGCCAATA  
TTTTTNCATA AATTTGACCA AAAAAGAAAA AGCACTINAAT TTCCCTTTTT ATACAAAAAT GNTTAAGTAG GCAAGT

SEQ ID NO:1017: (Length of Sequence = 259 Nucleotides)

GCTTCCTAG ATTTTTCCT AATTTTGAC CTATGTGGAC AAAAAAATA ATCTAGTCCA AGCTTTCCT ACCTTCTTTT  
TTTATTCGCC TTCTGCTTCT GNGTTCACA TGGGAACITG AAGTGGTTTA TAAGAATGCC ATGCTGTGCA AATAGTAAAA  
ATGAATTTNC TGATTTTAA AAAAGCCCTC AGGAACGGCA TATGTATANG GTATGTATAT GAAAAAANGT GTTNAGGAAT  
GCAGGAGGGA AACTAGGCG

SEQ ID NO:1018: (Length of Sequence = 354 Nucleotides)

CTGGAGGAGG AGAAGAAGCA TCTGGAGTTT ATGAATCAGC TAAAAAATA TGATGACGAC ATTTCCCAT CCGAGGACAA  
AGACACTGAT TCTACCAAAG AGCCTCTGGA TGACCTTTTC CCAATGATG AAGACGACCC AGGGCAAGGA ATCCAGCAGC  
AGCACAGCAG TGCAGCGCG GCINCCAGC AGGGGGGCTA CGAGATCCCC GCGCGGCTGC GGACGCTCCA CAACCTGGTG  
ATCCAGTACG NCTCGCAGGG GCGCTACGAG GTAGCTGTGC CCGTINCAA GCAGGCCCTG GAGGACCTGG AGAAGACTTC  
AGGACACGAC CCACCGGAC GTGGCCACCA TGCT

SEQ ID NO:1019: (Length of Sequence = 393 Nucleotides)

GATGACCGAT TTGGCCATGG AAGACTTATC TTCATGGCAC AGAGAGNYTG TSCAGAGATG AGTCAGACTC AGGGGCTGAG  
TAACAGCAGA GCAGAGAGTG CAGAAGTGA CGCTCAGAAG CGAGTTTATG TGIGTYTTTY CCTCTATCTG CTGGCTGTGG  
CTGGTACTGC AACCTATCCC AAAGTAACAG CCTAGTCAAT GAGGTATATG CTTCAGATCT GGCAAACTCT CTCTGCACAT  
AAAAGTGTA TTCTTAGTTC TCTGAAAGAC CCCCACATCT TTGAAGTGTA AACTAAGAGC TACATTTTCC CTTTTACTAC  
ATCTCCCTTA AAAGGAAAGC ACTACAAGAG CTTTAAATA GCAAGCTTCC CTATTCTAAG GGGAAANAGT CTT

SEQ ID NO:1020: (Length of Sequence = 403 Nucleotides)

CTGAGGAAGA GAGGTGAAGT GGCATCTACC CAAAACACCT GTGTACTGGT TAATAAGGTC GGTAGTTCCC ATTAATGAGC  
TTGATGAAGG ATGGCACCTG ACAGGGCCTT AAATGANCTG ATGGAGTGAA TGTNACCACT GTGAATTAAA TTTCCTTTAT  
ATATAATAAA TAGCTGTGCT TACACATTTT CAGATTNCT TTGTACGCTA TGGACATGGA ACAGCGGGAC TATGATTCTA  
GAACAGCACT CCATGTAGCT GCTGCAGAGG GTAATACAGG AACTACTCCT ATCTATTTC TTTCCAGATT TAATTTCTAC  
TTAGTACTAA AATCTGCTCT TTTTGTGGG GTGGGACGGT ATAGGTCATG TTGAAGTGT TAAATTTTTT NCTGGAAGCC  
TGC

SEQ ID NO:1021: (Length of Sequence = 452 Nucleotides)

ATCGCAACCT GGCAGGGGTG TGGGGTTTGC TGGGGGCTC TGTGGGGCCA TGATCTGAGG AGGGTATGTG GGGGGCGGGA  
GCTCAGCACA TTCCATGGCC TAGAGGGGCC ACACAGAGGC CCCAGTGGGA CCCATGGCGT GGAGGCAGGT ATGGGGAGTT  
KTGGGGAGAT CCCAGGGTGG TCTGGGGCCT GGAACGGGCC ATTKGGAGGC CCCAGCAGTT TCAKTGCCCA GGGCCTCCCT  
GCAGAGCCAT GCATGGCAGA AGAAGTGTGT AGCATGAGCT GGTACAGGCC CATGCCATC AAGAAAGGCA GTGTGGTCAT  
GGGKTGGAC ATCAGCAGCA ATGGCCTGGG GACCTTCATT CCAGATAAAA GGTTCAGAT GATATCAACG GCTTCCTGAA  
GAGAGACCG GGCATAACA TCCATTCAAT TGGGAGAGGA GGTTCAGTAT NT

SEQ ID NO:1022: (Length of Sequence = 413 Nucleotides)

274

AGCAACAGAA GAAAGGGCCA CATATATGCA AATGCCTGGT CACTATATCT GGCCCTGAAG AAGGAAGGAG TTTGCAGGGC  
 TCAGGAGACT GGAAATTTTT NCCAGGAGCT AGGAACGAGG GGTTGGGAGA CGTTGGTCAA AGGGTACAAA GTCCAGTTA  
 TGCAGGATGA ATAAGTTCTG AAGACCTAAC ATACAGCCCA GTGACCATAG TGAATAACAC TGAATGANCA GTATACTCGA  
 AATTTGCTAA CAGAAGAGAT CTTAAGTGTT CTCATAACAC ACAAACATA GCAACTGTAT GAGGTGATGG GTATATTAAT  
 TAGCCTGACT GTGGTTATAC ATTTTATCAA AATGTCACAC TGTGGCTGAG TNCAGAGGCT CATACCTATA ATCCCANCA  
 TTTTGGGGA GCT

SEQ ID NO:1023: (Length of Sequence = 379 Nucleotides)

TCAAGTCTCA AAACTTTAAA AGACAGTAGA TATTGTGGT TTTCTAGCTA AATGAGGGCC AAGATTGGNC TTTTCAACT  
 AAATTGAATC ATGTAGTATA TCTGATTTCA TAGCTTTCTG GGGGAAAAGG GAGGATTGGA ATTAGCAGCA GTGCAGGTCA  
 GGAGCAGTAA AGAAGACAGT AGGAGGAGTC CAACTACAGA TGTGAATGAN CAGCCTCAGA GGAACACATG AGAAGGTGAC  
 CTGCTGTTTA TCAGGAAGGC GGGGCTTTCT CTCTAAGATA CAAACCAAT AGGAATCGTC AAATAGTTCA AATTATCCGG  
 GGGAAAAGC CTGAGCAATG ATCCCTCTGG AAAACAAAGC AGTTCTCAGG CAGCACCTT

SEQ ID NO:1024: (Length of Sequence = 320 Nucleotides)

AGTCTACAGG AACAAAGAAA TCTAAGATGG CTGCTCAGCC TTGAAATGTA CATGTTTTGC AGCAAAGTTG TTGAAGAACC  
 TTCCGTTGGC ACAGATTGTC CTTTTTCAACA AGCATACAGA AGCCTCCTTC CGCCAGGNC TCTTCGTTG CATCCTTGCA  
 AATGGCTCCC ATTTGACACA TTCTAAGTC TAAGAGATA CCACTAGGGC AGCTTGTA CA GTTCTTGAAT CCTGGGCCAT  
 TGCACGTCAA ACAACTGATA TCACATTTTT TGCAGGAT TGTATCCATT CTCTGAAGAG TGGTCAAAGT AATAGCTGAT

SEQ ID NO:1025: (Length of Sequence = 368 Nucleotides)

TATTTAATCA TTTTCTCTT TGCCCTGAAGA CTTAAACTA AGAAGATTAT TCGAATGGTG AATTAACCTG TTGAAGAGAC  
 TATTCCAAAG GGATAGAATG AGACTAATTY CTGACTATGT TTTGCTAGTG ATGGGTGGAT GGGAAACAAAC ATTACAAGAA  
 ATAGCATAAT GAATGTAGAA AATATTTCAG TTTGGAGATG TGCATGANIT AGTTTCTAG GTTTGCCACA ACAAGCATC  
 CCAAACGGT GGCTTAAAA ACAGAAATTT GTTTCATGGT TCTTGAGCCT AGAAGGTCAA AATCAAGGTG TTGGCAGGAC  
 CATGCTCTCT CTGAAACTCT AAGGGAGAAG CGTTCTTTGT TCTTNCCT

SEQ ID NO:1026: (Length of Sequence = 379 Nucleotides)

GGTGAGGTG CATAAGGAA GGACCATGTG GGCTCAGAGC AAGGGGGGG CCATCTCCTA GCCAAGGAGG GAGGGCTCCA  
 GGGACCCCAA TCTGCTGGC ACCTAGGCCT TGANCTTCCA GCCTCCAGAC TGGGAGAAAA TAACGTCTCA TTGTTAAAGC  
 CCCAGCAAA TGANTACAGA ACCTAGGAAG GGGCAATGAA TGANTGATAG GTGGAAGGGC TAAGAAGAAA AGAGGAGGGA  
 GAGGAAAGAG ACGTGCTCAG ATCTGTCTCT NCTGGACATC CGATCCAGG CTGTCTCTTC AGTGGGNC CA AGTCCAAC TA  
 GCAGTCAGCT CAGAAATAAT CCTNAGGCA TCGAAGCTTT CACAAAGGAG GNCACAAA

SEQ ID NO:1027: (Length of Sequence = 411 Nucleotides)

GCCCTTGGCA CCTAGAAGCA GCCAGGAGG AAGTACTGAC CATTTAAAAG TGGCAGATCT CCGGGCCCA TTTCTGCAGC  
 CTTCAATTCTG CAACTCCAGG GAGGGTATTT TTNATTTGTG GGTTCAAAA ATCTGTATAT ACAGTCTATG TGTTTAGAAT  
 TTGTGTGTGA AGTAACTAC AGCTTTGAGT TGGAAAGAAG TCACGGGTG TAAACCAATT TGGATTTTTT TAAACAAAA  
 GTATTATAA TCTGGAAGAC AGINTTGCCC AGGTCAGGAG TGTTTCTTG GTGGTTCCAG CCCCCATCA TTGAATGTT  
 TCTGGGCTCA GTCAGACACA GACATTCATC TGTGTCTGAC CAAATCAGG GCTTTCCAC CTGTGGGGA GGGCACAGTT  
 AGGATGTTTT T

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AGTGGCTTAC AAAACACAAA TTTATTATCT TACCATTCTG TGAGTCAAAA TTCCAAAATA GGTGTCACTA GGCTAAAATG  
 AAGGACTGCA TTINTNCTG CAGGCTCCAG GAGAGATCTA TGTCTTACTC TTINCGGCTT CTAAAGGCTG CCCACATTCC  
 TGGACTAGTG GGGTCCCTCC TTCATCTCTA AACCCAGCAA CAACAGGTTG AGTCCTCATG TCACATCTTT NTTACCTTTC  
 TGTGATCTCA TCTCGCTGAC TGCTGCTGGG AAAAATTCTC CACTTTTAAAG GGCTATCATG ATTAGACTAT GCCCACTAGA  
 TAATACAAGA TCTCAGATCC CTTAACTTCC ATCACATCTG CAAAAGTCGC TT

SEQ ID NO:1034: (Length of Sequence = 320 Nucleotides)

CGCGCCGCGA CGGACGCCCT CAACCGGCAA ATCCGCGAGG AGGTGGCGAG TGCACTGAGC AGCTCCTACA GGAATGANIT  
 CAGGGCATGG ACGGACATCA AGCCTGTNAA ACCAATAAAG GCCAAGCCCC AGTACAAGCC CCCAGATGAT AAGATGGTTC  
 ATGAGACCAG CTACAGTGCT CAGTTCAAAG GAGAGGCCAG CAAGCCAACA ACAGCTGACA ATAAGGTCAT TGATCGCAGA  
 AGAWIACGCA GCCTCTACAG CGAACCCTTC AAGGAACCCC CAAAGGTGGA AAAACCTAGT KTTCAGAGTT TCAAACCAAA

SEQ ID NO:1035: (Length of Sequence = 375 Nucleotides)

TTTTTTTTTT TCAGTGGAAA ATAACITTTNA TTGAGACCCC ACCAAGTGA AAANCTGTNC CTGGCATTAA GCTCCTTCIN  
 CCTTTGCAAT TCGGTCTTTC TTCAGTGGTC CCATGAATGC TTCTCTCTCC TCCATGGTCT GGAAGCGGCC ATGGCCAAAC  
 TTGGAGGTGG TGTCAATGAA CTTAAGGTCA ATCTTCTCCA GAGCCCGCCG CTTCGTCTGC ACCAGCAAGG ACTTGGCGAG  
 GGTGAGCACC CGCTTCTTGG TTCCACCAC ACAGCCTTTC AGCATGACAA AGTCATTGGT CACTTCACCA TAGTGGACAA  
 AGCCACCCAG AGGGTGTATG CTCCTGTIMAG ATAGGTCATA GTCAGTGGAG GCATT

SEQ ID NO:1036: (Length of Sequence = 304 Nucleotides)

CCTATGTCT TCTCTTTTT GCTTCTCTC AAGTAGAG TGACTTTTTT GAAGGTTAGC TTCTCTAAG AGTTGCATGC  
 TATNCTGGC TCTTACAATA GCCTCATATC TCINATTTC TAATTCATTG CACTTTGCTT GTAGCTCTCT GGTCTGTTTT  
 TCCAGATGTG TATTINCGGN TCINAATTGG TTGGCTCTT GGATTGTAC ACATAATCTT ATTCTAATT GTTTTATACT  
 AGACTGTAAC TGCTGTAAAC GGCTATCTGA TGCTTCTCT CTINCATGGG CAGACACCAC ATCC

SEQ ID NO:1037: (Length of Sequence = 341 Nucleotides)

CTATGAGGAC CAGCAATTAG ATTTTATAGC AGTACTTCCC ATTAAAGTGA ATAACCAAAA TCACITTAAG GTCAAGATCT  
 TAGTCAATAC ATTATGTAA ANCATATACA ACAGACAATA CACCAGAAAC TAAATCTTTT GCAACCTTTT AAACITATGA  
 TGAAAAACAT TAATGTACAG TCTAAATGT ATTAAGCAGT TTTTACAAAA AAAATGTATA GAATACAGGA GCCAAAACAT  
 TTANCAATTA CCTTAACCTG CTGACACAGA NTAATATTAA TAAATAATAC TGATCANNEN AAAGTAATCA ATTTGAAAGT  
 GGTGGGGGTA GAAGGACAAC A

SEQ ID NO:1038: (Length of Sequence = 281 Nucleotides)

GGAGGCTGAG GTGAGAGGNT CCCTTGGGCC CAGGAAGTCA AGGTTCAGC AAACAGTGAT TGCACCACTA CACTCCAGCC  
 TGGCAACAC AGCAAGATCC TGTCTCAAAA AAAAAAAAAA ATATCAGTAT TGTTTTATTA ATTGTAACAA ACACACTAAA  
 TAAATGTAAAG ATGCCAACAC TAGGGGAAAT AGGATNIGGN GTAAATGGGA ACTCTCTGNA TCATTTTTGC AACTTTCCTG  
 TACATCTTAA ACTATTTTAA ATGNTCTAC AAAAGTTAAC A

SEQ ID NO:1039: (Length of Sequence = 246 Nucleotides)

CCATGATGG CAAACATGAG GATGGCAAAG AAGAGAAGCA GCCCAATCTG CAGGAGTGA ACCATGGCCT TCATGATGGA  
 CTTGAGCACC ACCTGCAAAC CTGGGGCCAG AACAGGGCAG GTCAGGAAGC AACGTGGGCA GGGTAGGGCA AGGAATTTTG

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TGGGGGCAGG GACAGANCAG CAGGAACCTA GCAGGGACAG CAAGGTGCTA AGCAGTNA GTTTC AAGG GCAAAGGTTA  
GAGCTG

SEQ ID NO:1040: (Length of Sequence = 399 Nucleotides)

GAGGTCAAGA AGAGCTTAAG AAAATATAGG AGATACTACA GCATGTTTGG TTCATGACCG GAATGATTTA GTAAGAAGGA  
AAAGCCAATA ATGTAAGAAA GCGGATTGCA GGAGCAAAGA CTTTAAGGAA TAAAAAGGNC AAAATTGTTT GTTCTCAGG  
GAAGTAATGA CAGGGGCTGA GCAGGAGCCA GGAAACCCAG CTTTATAGCTT CAGNTCTGCC TGACATTAT TGGTCATGTG  
GCTCTGGGTG TATTCTCACT TCTCTCCCT AAATAGCAAG AAGGAAAAGC CTCTGGAGC CTCGTGTCTC TGCTTCTTC  
TGTAACATGG TTATGTTTCT GNTCCGCTTA GCTGGTTAAT TATAGAATCA CCGTNGCTGG GGTCTTTTGG GGACTGGCC

SEQ ID NO:1041: (Length of Sequence = 324 Nucleotides)

CCATAACAG TCCGTCACTG ACAATGTTG TTACGCAGCA CATTTTATGC AGTGTGTGAC CATAACGAT ACACAGAGGA  
AATTCAGGC TTCTAGGAAA CCTCTAAGG CCTCATCTCC CTAAGGGCAC CTGATGAGCC ATTCTCACC CCTGCACTGC  
ACCAGGNTC CAACACCACC ACCAAGGCTA ACCGCTGTGC ACTCTGGGCC CTGGGTCTGC AGTACCTGGC TCCAAGCAC  
ACCAGCATCT GAAAACITGN CATCCTTGCC GAINFINCGG GGAGTATTGG TTGATTGCAG TGACAAATCG GCAGAAGTTC  
CGGG

SEQ ID NO:1042: (Length of Sequence = 212 Nucleotides)

ATCTGTTTCT CAGAGATGAC ACTGCCAACA ATCAGAGAT TGCAACAAT ACAGTTATGT ATTGGCTATT CACAATTAC  
AGTAGTGT TTCCCTCTGA AAAATATAAG TNCAAAAGCT AAGTAAACAA TNGGGTACTG CCATTGGGN TTTTACAT  
GGNCTTAGCT TAAAGAACTG GTCCTTAGCA AATATTCAAC AGTCAACCT GA

SEQ ID NO:1043: (Length of Sequence = 329 Nucleotides)

ACTTGGAGAA AGAAAAATTA GAGAATTCCA GATCCTTAGA ATGCAGATCA GATCCAGAAT CTCCTATCAA AAAACAAGT  
TTATCTCTA CTTCTAACT TGGATACTCA TATAGTAGAG ATCTAGACCT TGCTAAGAAA AAACATGCTT CCTTGAGGCA  
GACGGAGCTA TTCCAGATGC TGATAGANCC ACTTTAAATC ATGCAGATCA TTTATCAAA ANTAGINCAG CAGCAAGATG  
AAGAGCGAG TCGGCAGCTG AGAGAGAGAG CTCGTAGCT AATAGCAGAN GCTOGATCTG GAGTNAAGAT NTCAGAACTT  
CCAGCTAT

SEQ ID NO:1044: (Length of Sequence = 285 Nucleotides)

GTTGAAGCTG TTTTATTTT ACACCTTCT GTTTTAAAC ATAGGGACTG ACAGGGAGAC CCAGGGCTGC AATCTGGGTG  
GTGCTACATT TGTAGACAAG GACAACTTGC TGTATTTTAA CCCAGAAACA TTAGAAAGTT TGTCCCTGAA CTTCTGGCTC  
AGATTAGAT GCATCTTTGA AGTGTGATA TTTGGCTTAT CTGAAGCTTT GGGATTATCA TTINCTAGTT ATGAAGGGAA  
TGAAAGTGT CATAACATTT TTGCAGGTGG AAGGTAAAGT TGTG

SEQ ID NO:1045: (Length of Sequence = 317 Nucleotides)

TCGGTACTG TAGTATGTA GTATAGTTT AATCAGCTA GTGTATGCC TCCAGCTTTG TNCCTTTTGC TCAGGATGT  
CTTGGCTATA CAAGGTCTTC TTGATCCCA TATGAAATTT AAGTAGTTT TNCCTAATTC TGTGAAGAAT GTCAATGGTA  
GTTTCATGGG TATAGTATG AATCTATAAA TATTTTGGG CAGTACGGNC ATTTTCATGA TATTGATTCT NCTATCCAT  
GATGATGGAA TCTTTTCCA TTTGTTTGGG NCTCTCTTA TTTCTTGAG CAGTGGGTTT GTATTTTGG GACAAGA

SEQ ID NO:1046: (Length of Sequence = 316 Nucleotides)

CCAGGTGCAA TCTCGGCTCA CTGCGACCTC TGCTCCGCG TAGTGGGACT CCAGCTGTGC ACCACCCAGT CAGCCCCACG  
 CCCACCTGC CAGGGGTGTG CACGGTTCAG CGTCACTTTA CAGATGAGGA AACTNAGTCT TTGGGAAGCT GACAAGGTGC  
 CTGACACAGG CCAGGCGAGG GNCACCTC ATGGGCTGTG CTGCAGCCTC TGCTGTGTG GTACGGCAC CCCATCTACG  
 AGGNGCCCT CAAGGATGCG CCGTCGAGT CCGGGGGCC TTGGCATGTN CCTGGCAGAG AAGGCAGCTC AGGGGT

SEQ ID NO:1047: (Length of Sequence = 261 Nucleotides)

CTTCTCAAA CTCGGTTCC AGCTGGGTCT CAAACTCAGG CTCCAAGTGG GTCTCAAAGT CGGGCTCCAC CTGGTCCCA  
 AACTCGGGCT CCACCTCGGT CCCAACTCT GTACCACT CTCTNAGGT CTCANTCTCC GACTCTCCC AGCCAGCGT  
 GGTGGCGT ATNAGGCCCC AGGGCTCTAT GGTAGTGCTC AGGGTGTGTG GCAGGGCAG GGGGCAGCT GGGAGGCACA  
 GTGTGGGGG CCTAGGTGG T

SEQ ID NO:1048: (Length of Sequence = 390 Nucleotides)

GAGAACAAAG AGAATGGAGG CCACATACAA TGGAGTAACA GAAGCTTTGC CTGTAGCTCA AGAACCAAGC CGAGAATCCA  
 CACCTCTGA TTCACAGTTC AGTATTTTCG GCCACTTAC TCAATATTT TTATAAATTA TTTTAAATC GGCAAAATAT  
 TTAAATTTCA TCCATTAAAT TTAAATTTCT AGATGCCCTA GTGGCATCCA GAACACATAT TTNGGGGAAA ATATTCTAAT  
 TTTTAAAC AGAAAAAGCT AGGNCAGAT GATGCATTAA AAAAGTAGAA CACAGAGCTC TTAATTTAGG AATGATCAAA  
 ATAGGGTTGA TTCAACTATT ACCTTCTCT AGGGATTATG GATCAACCCC TAGCAGCAGN CAAAGTCACA

SEQ ID NO:1049: (Length of Sequence = 335 Nucleotides)

AAACTCACAA GTAAATAAT GCATATTTAA GGGAAATATT ATACAGACTT TTTACACAG AAGTACATAA TANGATTTT  
 TAAATCTAT TGCCATTCAT TTATTTTGC ACAAAAAGT ATAAATATGT CACCAGCTTT NCTTAACCTA AAAAATTA  
 ATAAAGACA CCAGATGAAA ACTACCTTT GCTGCCATT TTTTAAAGT TTTTGTAG GGGTTTTTA TTTTGTGT  
 TTTTINCTT TTNCTGCTTA GAATGGGTT TCTAGGGAAG AAAAGCCCT GCATTAAAA CAGNCCATT AAAAAAAA  
 TTCAAAGTTC TGGAT

SEQ ID NO:1050: (Length of Sequence = 265 Nucleotides)

AAAGGGAGGG AGGGAGGGAT GTGGAAAATA TGCAAGATAA ATTAAATNCT TAGTTAAAAA AAAAAAAG TTTACCAAC  
 TGINTCCAT TACTGAGAAG CCCCCACT GCCCCACTGT GCATATTCCT AGTATTTCT CCATGCTCTG CTCTGCTGTG  
 CTGCCCTACA AAAANCCCT CCGGGGGG AAAAANAANC AAAAANCGG TGTAGTGTA ACTGCTGAAG AACTTAAATG  
 TTCAAGNGCA TCTTTAAGT CTAGG

SEQ ID NO:1051: (Length of Sequence = 298 Nucleotides)

ATTTCTAAAA TGCTCTCAA TACTAATATT ATACATCTC CCATTTATCC TCAAAAACC CATGAGACTG GTGATGTAAT  
 TNCGTGTTT ATTTACAGC TGTGGCAGT AGTCTAAGA CCAAGTGATT TGCTCAAAGT CATGGAACAC TTAAATGGCA  
 GAGCTAAGG TTAAACCCAG AATTTAAAAA TTTTITNAG CTCTINGTT TTNCCATTAT ACCAGTTTG CCCTTCATT  
 TATTCATGG TTAAATTAA TTATGGTAAC AAAGGGCCC TGGTCACTTT GGACATT

SEQ ID NO:1052: (Length of Sequence = 359 Nucleotides)

AAGGCAACG TGGTACATCA TGACACCATG GGAATGACTC ATGCCAGCCA TAAAAAGAT GAGAATCTG TCCAGATTG  
 GTTCTTCCG GTGGGTTCTT GGTCTGCTG ACTTCAAAA TGAAAGCCAT GAACCTCGT GGTGAGTGT AACAGTTCT  
 TCAAAGATG TGTGTCGGA GTTNTTCCC TINCAGATG TTCCAAATGT TATCCCAAGT TTCTTCCCT CTGGTGGGT

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TGAATGGTTA ACCAACCCTT AGGCTACCAC TCTGTATTTC ATCAGGGGTA GGGGTATTAA ACCCCACATG CAAGTAAGGA  
ACCCCTGCCC CCAGTGTGCA AATGGGATGG GGATGCT

SEQ ID NO:1061: (Length of Sequence = 206 Nucleotides)

AGAAAGTAAG ATTCTCAGGG CAACAGTGTA CAGCAGAGTG GTTGCTCCAC AGACAGAGGA GGGCAGAGTG GCCCAGAGTA  
TCAGCGTACA GCAAAGTGGG TGTTCCTATC CACAGGGGCA GCGCTATCTC ATAGGANAGA ACAACCCCTA GGAAGGCAAG  
CGTCAGNCAG NCAGCAGTGN AACAGTCAAC AGTTAGCCAG TGTCAG

SEQ ID NO:1062: (Length of Sequence = 316 Nucleotides)

TINCCCTCAC AGAGTTTTAG TTAGAATCAC TTTCTCTATT TCCACAAATC CTTCTTTTCT TTCTTTTAT TTTCTAAAGT  
GAATGTCCAA GCAAAAAGGA AGCAAAAATG GTCAAGATC TCTCTTACAA TATAGTAATA AATTTATNCA AACAACTTGG  
AATTCACCTT GTGCATTGAA AATNCAACTC CACACTGCAA ATTATGGCAT TTTTCCNC TCAAAGGAAT TAGTGAACTC  
CATTGGATGC ATTCATACTN CTGTTAGGN AATAAGGGAA ACCGCTTGT AAAAGTNCAT CATGGCCTAG GAGTA

SEQ ID NO:1063: (Length of Sequence = 314 Nucleotides)

ATGATCTGGT TTATGCTTCA GAAGAAGCAT AGTAGCTTCT ACAGAAAATA AATGATAGAA GGCAAAAGAG AAACATGGCG  
AGTATTCAC TCCAGTGCT AGTCAAGAGA TTACAAGGGC CTTGGCATGA GGACAACAGT AGAAATNGTT AAAAGTGTAC  
TGGATTGCAA AATATTACTT TTGGGCCAGG GCGCCGNGG AACACGCT ATTAATACCC AGCACTTINT GGAGGTGCAG  
GGAGTTNCGA GTACCAGTCC TGGGCCAACA CGCTGGAAA TCCTGTGAA AAATATAAAA ATTAGCCGG CCGT

SEQ ID NO:1064: (Length of Sequence = 322 Nucleotides)

GAAAGCATTT GAACTAAGTN TGTA AAAATG GCAGATAATA ATTAACTT GGTAGCAAGA AACGCTTCT GAAACTCTGG  
GAACACTGAC TTGTTTCACT GTAACCTATC ACCTAGTGCT GTATCTGCCA TAGTGCTCAC AATTGCAACT TTATATCCAA  
CATGGGTGTT CCATTTCTAT TTGGATAAAA TTTACTGGAA ATATACTAGC AANGAAAAAC TGGTCTTAAA ATGGCAAAAG  
GCTCTGGCAC TAAATCACT GCTACTTAAC TTAGTTACT AATTAACCTC CTTAATTATA GTTTTCCAAA TCCGCATGCA  
CG

SEQ ID NO:1065: (Length of Sequence = 297 Nucleotides)

CCCTGNCAC TCCTTGATG GACTGATGCT GGAACTGGG TCAGGGAGCT CCAGGAGGAA CCAGACAGGN TCCTGTAGC  
AGGCTCACA CAAGTTCTAA AGGGCACCAG CTTGAGAAG GGCAGTTGGG ATGTGGCCAA ATGTGAAGCC AGGTTTCTG  
GGATCCTGAC TGTCCAGGT TACAAGTCC TGGCCACTCT GTGAACCTTG GGCAAGTTAA CTTCCAACCT CTTTACAAGT  
TCCCTAATCT ATNAGGAAAC ANTTAGTAC ATGACCTTCA TGGGAATTAA TTTATGA

SEQ ID NO:1066: (Length of Sequence = 267 Nucleotides)

ACAATGGGAC TGTCAGAGCA GCCAGCTCCT CCTGACTGC TCCACAGGAA GAGCCATCAA CAAAGCCAAT CCCTGGAGAT  
AGGCTCTGAA ACCAGGATAG AGACTCCTC AATGGCTGCT GNTGGTTCCA CCATGTATCA TCCAGAGNAA TCACCTGNG  
TGGGCATAGG TGGGCCTGGG AATCTAGGGC ACAGCAATTC CACATCTT CACCTAGAAA CCCTCCTTCT GGGTGGGCTT  
GCATGGTTTC ATGCTGTAA ATCCAG

SEQ ID NO:1067: (Length of Sequence = 220 Nucleotides)

AAAATGCAAT TGGTTTGTG CTGAGTACTA TCGTGGGAA GACAGCATCC TGNACTCCCT CTCTACAGAA TATTGGGAGT  
AAAAATGAAT GTCATCCCCG GTGGGAAATA TTATTGGGGG TTGAAGCAC AGAGCACAGG AAAAATTAAG TNCAGGAAAC



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AGACACTAAG AGTGCACTGG GCAGGTCTGA CTGCAGGTGA TGCAACTTGC CAGCOGTGGT

SEQ ID NO:1068: (Length of Sequence = 412 Nucleotides)

TGGCCAGCAT CTGGGAACCT TGGGTGTGTG GACCAACTTC TTCCAACACG TGCGCACTGA TGGCOGGGGC CCCAGCCAGG  
CCTGNCCTGA AGGGTCTTCC CCGNCCCGAG GGACTGTAGG GGGTCTCTAG GAAGCATCAC ATCAAGGTCC TCAGGTTAGA  
TNCAGENCAG CCCATTGACC CATTINAGGG GACAGCTGGA GGAAGCCCG GAGTCCCTTG TTTCTTCAGC TGAG

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TGCTCATGA AGATAATTTA ATGCTAGACT GATTTCTGCA GAGTAAATC TGGCATGTNC TTCAGGAAGT TTTCTTTGTC  
GCTGCATATG AAACATTAGG TCTCCTCCAT TTACATACTC TATAACAAAG AACAACTGTC TTTCTGTCTG AAAGCAAGAA  
TGCAGCCTAA CAAGGAAAGG ATGATTGGAT GCTGTCTCAA ACACATGCTT CTCTGTCTGT ACCCAATCAA TATCCTCATC  
ATCAITAAAC AGCTCTTTT TCACAACTTT CATGTGATAA ATACGATCTG TTTTTTTTAA TCGAACCAAC AGTACTTTGG  
CATAACTTCC TCTTCTATT ACCCGGAGCA AATCAAATC CTGAAGACCT AGACTGGATG AAGCTTTGCA CTTTCCCTGG  
NGTCATTGCC TC

SEQ ID NO:1070: (Length of Sequence = 358 Nucleotides)

GTGATGTNC CACTGCACTC CAGGTTGGGT AATGCAGCGA GACTGCGTCT CAAAAATAA ATAAATAAA AAAAAAAAAA  
AAAAAAAAA AAAAAAAAAAG CACCACCGCA CTCCAGCTG GGCAATAGAG TGAGAACCTG TTTCCAAAAG AAAAAATNT  
TAAAGANTG ATCTNGGCCA GCGTGGAGG CTCATGCTTG NAATCCCGAG ACTTTGGGNG GCCAAGAACA GGTGGTTCAC  
TTGAGNCAG GAGTTCGAGA CCAGCCTGGC CAACATAGCA AAACCCCAT CTNTACTAAA ATTACAAAAG GTTAAGTGGG  
CATGGTGGTA CATGCCCTNG TAATCCAGT TACTTCCG

SEQ ID NO:1071: (Length of Sequence = 411 Nucleotides)

CTATTTATGA ATTCTGCGAT TGGTTTGAA AACTCAACAC AGTTAAATGA ACAGGAATTG AAGGTGCATG ATGGATCGGT  
CCCTCATAGC ATTTAAATCT CTTCCACTTG ATTAATAATT CCTAGTTCTT CTTCACTGAA TTGTTTAGAG TTTTINAGCA  
GCTCTGCCC TGATTAAAC AAATTAGCAT CAAAGATCCC CTGTTGAATG AGAAATCATT AATTGAGAAA CATGCAATGC  
TCTTAATTA CTTTATAGAC AGTGAGAGAA CAAATAATCT CAGGTTCCAG AGGCCCCGTC CTGCTCTGCA CCGTGAAGTC  
ATTTGGTGTG GCTGCTGGAA TAAACTCAA GTAGGCAAC ACTATTTGGG GAATATCAAT GCAAGCTTTC AGTAAACACA  
CTGTAGGATT G

SEQ ID NO:1072: (Length of Sequence = 342 Nucleotides)

TCCATTTTT ATAAATATG GAACATGAAA CTGTATTCT ATGAACCTAA TGATTTTTTT CCATAAAATT ATATGCTAAG  
AGAGTACCA CAAACTATG AATTCTCTCC CGAATTATTT TTGCTTCTTT GGAGCACCAT AGTCTTTGTT CAAATCACA  
CATGAACTG TTGCTGCAAT GCTAAAGATG TGAATCCACC ACTATCAATA CGGTACAGGT AAAACCTGGA GCCACATGTT  
ATTCAAGTTA TTTTGTAT CTAAATGATT ACATGAAAAT AAAATAGTAA GCCAATATTA AATTGTAGG CATAGTTGCC  
CCACCINAAA AGTGTTTACA AA

SEQ ID NO:1073: (Length of Sequence = 217 Nucleotides)

GTCTCTGTC CTGCTAGGA TAATGCAAGC NCTTTTCAGA TGATTCAGAA TCGAAGAAA TACGCTGGTA AAACAGGACC  
TGTATACCA GNACTAAAC AATTACACTC CCATTTCAT TCTTTTCAT TTTTTCATC GNEACACAA CTTTAAAGAT  
GGAAGGGGAA AGCGATTTTT TTTTCAACAA GTGGGCCACC AGATGAACCA AATTAGA

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SEQ ID NO:1074: (Length of Sequence = 379 Nucleotides)

GGTTAAATTT TCATCGGAAT GTATAAGCTT ATTTATTAGT GTATTTAATG GTTCATCAAT TGATAAAACA GGTGTAGCAA  
 ATACATGCCT TCCTTTTGGG GGATGGGCTT GGTTAATCTC CAAATTGGCC GTTTGGAACA ACTCATCAAT ACTGTACAAA  
 GAAGGTACCA CTTGGTGGGA ACTTTCACTT TTTAACAAAA CTGGTTCATA TTTCTCACTT GCATAGGAAA TGGTCAAACC  
 TTGAAGTGAA GCAGAGTGCA TATGAGAAGT AGGCGACACA TCAAAAACCTG GTACAGATGT AGAGTGCAGC ATGTTTTCAC  
 TTGAAGCAGA ATTTGATACA ATGAGGATGC AACCATTGTA GANCTAAATT TATCAACTT

SEQ ID NO:1075: (Length of Sequence = 345 Nucleotides)

ATTAAAGTGA CAGTCCAATC AGAAATATTT AAACAAAGTT TCACTACTTA AACACCATCT AAATATACTT TTTGTTATAT  
 TCCAGCAGA AATTGATGGC AAGGAATCAT ATATCCCATC AAAACCGTAT TTTTCCCCCT AAAAGGCAGT TTAGATGTNC  
 TCATTCTAGG NTITCCATCT CTCTCCTCCA CCATTCCAAT TCCAGAGTA CCTCTACAAA TATCCCTGCT TACCAGTAGA  
 NCTATTTGCT TTAACAATCT TTCTGTGGGT AAGGAGATGC ATATGCCAAT GTGAAACTA TGGAGGGGGA CTCCTGCCTT  
 CAAAGGCTGA CTAGAAACCA TTGGA

SEQ ID NO:1076: (Length of Sequence = 286 Nucleotides)

TTTTTTTIGA GATGGAGTCT CGCTCTGTCG CCCAGTGTGG AGTGCAGTGG CATGATCTCG GCTCACTGCA AGCNCGCCCT  
 CCTGGGTICA TGCCATTNTC CTGCCTCACC CTCCCGAGTA GCTTGGACTA CAGGCGCCTG CNACCACGCC CAGCTAATTT  
 NTINTGTGTG TGTTTTTGGC AGAGACAGGG TTTCACCATG TTGGCCAGAA TGGTCTCTAT CTCCTGACCT CGTGATCCAC  
 CCGCCTTGGC CTCCCAAGGT GGTGGGATTA CAGGCGTAAA TMACCG

SEQ ID NO:1077: (Length of Sequence = 366 Nucleotides)

TCACATAGGT CACATTTTAC CCATGAAACC TTTCTAAATT ACCTTTTGCA TTINTTGCCT ATCCTTCTAC ATCATCATAC  
 TTGTCATTT AAAGTCACTT TTTTGGGTAA CATTTCAGAA ATTGGGATTC CTCTTACAAT TGCTATCAGA CAGAAGCCAA  
 TTATGATGTT GTCATTGCTT ACACATGGGN AAATAACAAA ACTGCCAGCA TGACATTTGC ATATGACAGT CAACAGCCTG  
 AAAGAAATTC CCAGAAATGA TACTGGAGCA TTCATTTTAC CCTCTAGGAN CCAAATGGAC TNGGAAGGAA GTAGAAGATG  
 GGAATCCCT AAGCAGCAGT CAAAGTAGGC TGGCTTTTCA TAATTT

SEQ ID NO:1078: (Length of Sequence = 380 Nucleotides)

GTTTAAAGTGC GAAGATTTTA TTAGGCGGTA CAATCCAAG GTGGTAAGGG TGAAAGGAAA GGCGAAGGCA GGCAAATACA  
 TTATTGAGCT GAAAACRACT TTACATTCAA GGACAGCTTC CAGACAAGCC ATGTAGAACC AGCATGCCCTT GGGACTGTNT  
 GGATGGCAGG GAGACGAGTT TCTATGCTGA CCACTTCATG CTTTCTSCCC CCTTTGGGGA AAGTATGCCT CACGGACCTC  
 TAACTCTCCC ACTTCTCTGG GGGCAGCACC TGACCCCTCC CGGCAACTNC TAGGCAAGAG CATTCTGTTC CTTCAAATTT  
 YTCACCTGAG TCTGAGTCAG AGCATYCCAT CATCAGAGCC TCTGTCAAGG AGGCAGTGCT

SEQ ID NO:1079: (Length of Sequence = 439 Nucleotides)

CITAAGTTAC TGAAATTGAA ACACCCCTTG TCCTTCTCGG CGGGGGCTTC CTGGTCTGTN CTTTACTTGG CTTTTTTCTT  
 TCCCGTCTTA GCTCACCCTT CTTGTCAACC AGATTGAGTT GCTATAGCTT GATGCAGGGA CCCAGTGAAG TTTCTCCGTT  
 AAAGATTGGG AGTCGTGGA ATGTTTAGAT TCTTTTAGGA AAGGAATTAT TTTCCCCCT TTTACAGGT AGTAACCTCT  
 CCACAGAAGT GCCAATATGG CAAAATTACA CAAGAAAACA GTATTGCAAT GTCACCATTA CATAGGAAC ATTGAAGTGT  
 TAGAGGAGTG CTCTTCCAAA CAAAACAAA ATGCTCTCTAG CTTTGTGTCG AGCTTTTACA AGGTAATAAC CTTTCTGTAT  
 TNAATCAGG GTAACCCCTT TCTGTATTG AGTGCAAGT

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SEQ ID NO:1080: (Length of Sequence = 419 Nucleotides)

CTGAACCTCC TGAAATAGG AAGTCTCAAT TAAAAATCA ATTTGTCATA GTCCACATAA AGATAATCAA TACATTTTGC  
TCTCAGTCTT TGGGATGGTT TTTGTAAATA ATATTATCTT GACAAAAACA AACAGGAAGA TCCCACCCCC AACACATACC  
ACATTCCAAT GTTACCTGGN ATTAAAAATAT ATACCAACAT GCATCTTTAG GTTACTCTGG TCCATGGTTT CCTCCAGTGG  
CAATGGAATT TACAAAAATG TAAGACGTAA TAGATATATA ATTATCTTTT TNCCTAAATG AACTAGCCT TAAAACTGG  
TACATAATGG TTCTGGGTT CANTGATCAA AATTATGGAN GTACACTTAA CCTATCTTCC ATTGAGTGGC TTTAAATGGG  
ACCTTAACT GTGGACTCC

SEQ ID NO:1081: (Length of Sequence = 411 Nucleotides)

CAGCGTTTAA ACCAAAGGCG CACTAAACCT CGTAAGCGCA TGANCAGATT TAAAGAGAAA GAAACTCTG AGTGTGCCTT  
TAGGGTCTTA CTTCCTAGTG ACCCTGTGCA GGAGGGGCGG GATGAGTTT CAGAGCATAG AACTCCTTCA GCAAGCATAC  
TTGAGGAACC ACTGACAGAG CAAAATCATG CTGACTGCTT AGATTGAGCT GGGCCACGGT TAAACGTTTG TNATAAATCC  
AGTGCCAGCA TTGGTGACAT GGAAAGGAG CCAGGAATTC CCAGTTTGAC ACCACAGGCT GAGCTCCCTG AACCGCTGT  
GGGTGAGAG AAGAAACGCC TTAGGAGGCC AAGCAAAGTG GCTTTTGGA TATACAGAAG AATATGATCA GATATTTGCT  
CCCTAAGGAA A

SEQ ID NO:1082: (Length of Sequence = 350 Nucleotides)

CTGTGAGGSC ACAAGTGTAG GTATCTTTNC AAGTCTCTA GGTGATTCTA GAATGCAGCA GGGTTGAGAT GCTCTGCCTT  
AGGGGTAGAG AGGTGGGAAC ACTGACAGGT TCTGCAAAC ATCTCTGAAC AGCTGCTGGT GTCTTTTCT GTACTTCAAG  
TTTCACGCA CATCTGATAG CTGTCGAA AGGGAAGAGA GAATTACGTG GGCTAGGCTG GTTTGAAGGT TTGCNTAAGN  
TTTGGCTTGA GCGACTTTAA CAGTTTATT TCAAAGTAAT TTGTGTTGT AGCCCCACTA AAGTAATTTT GGGCCAGNAA  
AGGTTCAAAA TACGGTTTTT CCTACTTAAG

SEQ ID NO:1083: (Length of Sequence = 430 Nucleotides)

GTGAAGTCCA CTGCTTATG GACAGCCCAT TTGCATGGG CCCTGCGTGT GGTGCAGCCC AGGGTATGIN AGGAAGGCCT  
CANAGGAGCT GCTGCTGCA CAGGTGGTCA CCAGGGCAGA GGTACACTG ACATACCTCC AGACCAGCCC GCTCCACTGT  
GGACAGGGGC AAGTACATA CTGCTGTTT ACCATGGGGT CACGGCAGAA CTGTGTCAC GGGGTGCTTT GTGATGCCAA  
ATGGATATAG GTGGGACGTG CTGGCAGCAG CGGCTCAGC GTGAGCCAT CTCCCTCCC GTTCTGCTCC GGCTGCCTG  
TGGGCTAAT GTGGCACCG TTTAAGCANC TGCTGTGTG TCAGCCTGG GGNCTGAGG TTTCCATACA TGATCACTGG  
TTCCTACCCA AGGCCTTAAT TCTNCCTGT

SEQ ID NO:1084: (Length of Sequence = 369 Nucleotides)

AATGGAAGAA GTGAAAAGA ACAACACAAA GAAATAAAG AAGTAACCTC TTTCACCCAC TGAAATAATC TCTGGAAAAG  
ATATTAGCAA TCATGCAGCT TATAAATATC TAAAGGCTA GAATTGAGGA ATTTATAAGA NTAANTTTT TTTCAACAC  
ATAAAATACA ACATGGGAAA TAAGATGTTT TTTACTAACA GGCAACACT TGAGGNGTCC TCTTCAAGA CTACAGTGA  
TGAAAGACCA GTTATCCAAA GGAAACGGT AGTAGAATA TAAAGTAGT CCCACACAAA ATTAAATGG TGCTCAATGC  
AGATTATCTA TCATTANACC ATTTTAAAG GCAATTINTT ATTTAAAT

SEQ ID NO:1085: (Length of Sequence = 413 Nucleotides)

ATACCTTINA GCTGGCATAA TTTAAGTTC TAATTATCCC TTAATCATAA GCTGTACGAT TCTATAATTA AAAAGTTAAT  
GCCTTCTTAA TGTCTATNCT AGTAGAAGAA TGATGAGAAA ATAATAGTAT AGATTAGTTT TGGTCTCTAC TCATTTTGCC

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TTCTGATTAT ATTACAACCTC CAGCTGGTGA CAAGATGGCT GTGTAAATCT TGAAATCACT GAGCATTTCAT TTTAGCTTCT  
 CATTGAAAGG TAGATATTCA GTATGAATTG TAACTGGCA TTAAGGGAGA AAGTAGGNAT AATCAAACCTT GATCTGAGAA  
 TTACTTGCTG GTGCATTTC TCAATGCATA GTAATATCCT TATGANGATG CAGATGCAAA AGTGGGTTTT GGAGGTGGAT  
 AAGGAGGGCA GCT

SEQ ID NO:1086: (Length of Sequence = 277 Nucleotides)

TGGATAGCAT GAGGCAAATT GCCAGAAGAG AATTTCTTTC GCATCCTAGT AGAATAAATC CAAATTATCT TTGTGGTACT  
 GAGGATGTCT GGTTTAGCAC AGTGTAAGT TGTAAACATT TAACAGGCTA TTAATTCACA GTCACATAAT CAATGCTTGC  
 CCGGAGTTTT GCTAGAAAAG GATGAGAAGG ATTAAGGTAA AAAAAAAAAA NAAAAAAAAA AAGATAAGGT TAACCAGATA  
 CATCTTAAGA GCTGATTGCT CTTCAATCCC TAACCTG

SEQ ID NO:1087: (Length of Sequence = 360 Nucleotides)

TTTTTTTTTT TTTTTTGTAG ACATTGTCTC ACTGCGTCGC CCAGGCTGGA GTGCAGTGGT GCAATCTTGG CTCACTGCAA  
 CCTCTAAATC CCAGGTTCAC GCGATCCTCT CACCTCAGCC TCCGGAGGGC NTGGGATTAC AGGTGTGAGC CACCGCGCCC  
 GGCAGCATT TTTTTTAAAG ATCTGTGATA GTGCATGTTG TGCTAGTTCT TTAATACAGA CTATATTGTA TTCCATGTCA  
 GTTTTTAAAG TTTATTTCCC TATTGATGGC ATTTAATTCC AACTTTTAGA TAAAAGGATG TACTGGACAT TTTTATAATT  
 TTTTGGGGG ACCATGTAAG AGTTTTTCTA GGGGGAATTC

SEQ ID NO:1088: (Length of Sequence = 209 Nucleotides)

CTGGGACCAG CTGGAACAGA AGTGGTAAAG GATAACTAGC TACCTGCACC GCCAGAGATC AGGNTCAGGG TGAAGCTGGT  
 TTCCAGCAG CGAAGTGAA GGAAAGTGGT TNGAAAGGAA GAGGAGGAGC AGGAGATGGT AGGTCCCTCG CCTNTCTCCC  
 NINCTACCCT GGAAATATAA GTGTCAGGTT CATACTTAAC CACCCCTT

SEQ ID NO:1089: (Length of Sequence = 409 Nucleotides)

TTTTGCTCAC AGCTACATCT TCAGAGGTGA GAACCATGCA TGACACAGAG AAGATGCTCA CTGATGGATT TAATGAGTCA  
 AACATTGAAG AATCAATGAG TGCCGGAAT AACAGGATA GGTGGCAGCA TAGCATGCCC TTAAGANCAT GGCTGTGGAT  
 TCAAATCCCA GACCAATCAC TGANTTTCAA GCCACTTTGC CTCTCTGAGC CTCTGTTTTT TCATCTGTCA AGTGGCAATA  
 ACAATAAATG GTACGTGCTT CATAGGGGCA CCTTGAGGAT TAAAAGAGAG GGTTCATAA AATCAAGTAC TGATTTCAAA  
 ACCTGGCACA TAGTAGGCAC TCAGCACATG GNCCTTATAT ACTTNTGGGC CAGCAGCGGC TGGGGTCTAT CCTCCCTGG  
 CTGGGTCCA

SEQ ID NO:1090: (Length of Sequence = 337 Nucleotides)

GAACCTNTCC CCATTGGAGA GGATGAGGAT GATGATCTGG ACCAGGAGAC ATTCAACATA TGTAAGGAGA GGATGAGGCC  
 CGTNAAAAAG GCACTGAAAC AGCTCGACAA ACCTGACAAG GGGCTCAACG TGCAAGANCA GCTGGAACAC ACCCGAACT  
 GCCTGCTGAA AATCGGAGAC CGGATAGCCG AGTGCCCTTAA AGCCTACTCA GATCAGGAGC ACATCAAACCT CTGGAGGAGG  
 AACCTATGGA TTTTGTGTTT CAAGTTTACA GAATTTAATG CTCGAAAACCT GCATAAGTTA TNCAGATGG CTCATAAGNA  
 AAGGTCTCAA GAAGAAG

SEQ ID NO:1091: (Length of Sequence = 411 Nucleotides)

CTACTACCAC AGGAAATCTC TATACCCCTT TTGGCTTTTC GTTTTAATGT AATTTCCTTA AAGCTTCAA GATAATTTTT  
 AATCAGGCAT GCTGAAATCT ATCTAACCTA TTAGTCACTA ATTATATCTT TCAAGCCTAT ATATTAAATGT TTCINCTGTT  
 GTAAATTCAT GATCATAAAG TTTTGGACCT GGCCATCAAT ACTAAAGCAC TGATATTTAG TTTTAGGTGA TACTTGGGCA

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TAAATACAAA CACGGGATAT ATTINGTCAT AGAAAAAAT GTGTACTGC ATTATTTTGC ACTTCTGAAG GACTGCAAAC  
 ATTTTTCAG CACAATAAGC AAATTCTTCT TTCAAAAAGG NATACTTING CACATATGTN AGGTTTGAA AATGACTAGG  
 NCCCTAGGGA G

SEQ ID NO:1092: (Length of Sequence = 349 Nucleotides)

AAAGAAAATG CCTTGGGAAG ACAGATGCAT TTTTCCCAC TGGTGTGCA ATTGCTCAA TATTTTNAGG ATGAATATCC  
 TCACCTTGGG GGCAAGTTTT TAAGAGTGAA TTGAATTAC TGGAGCAGTG AACAAATTAT TAGAGTCTGG TATAAGTGAA  
 GAAAGAATC ATGACNGTA AGCTGTCITG NAGGTACCAG CAACTGNC CTAAAATTTA TATGGAAAGG CAAAGGGGTT  
 AGAATAGCCA ACATAATACT GNAGAAGTTG GAAGACTCAC ACTATCCAAT TTCAAGGTTT ACTGTAAAGC TACAGTAACC  
 AAGGCAATGT GGCACTGGTG AAAAAGTAA

SEQ ID NO:1093: (Length of Sequence = 400 Nucleotides)

GGACCTTGTT TTACATTCTG GATTTTCCTT TTTACTTCC TAATGATGTA ATTAACTNC TTCTGTATT TNCCATATTT  
 CCTATAAAT GGTAGTTAGA TCTAAAAGCT TGATTTACTT ATTTAGATT TCTAGTCAAG GGTACTCAAT AGATTGTATT  
 TCTTTTGCC TCACACGGAG GTGCATAATG TCTGCTGGC CTGTAGTGAT GCTAAGGTTG ATCATTCTGT TCAGGTGGCA  
 TCAGTCTGTG ATAACCTTCT GTAAGAATCG TTCATTAACC TTTCATCTAA TGGTCCATT CATTCATGAT CTTTAACTGA  
 ATCCCTGTTA TTTTATTAGG GAATAGCAAA ATAATGATTT TCTAATTCTG TNATTCCTTT CACATTTATT AACTGTAAAT

SEQ ID NO:1094: (Length of Sequence = 414 Nucleotides)

GTCAGTNTTC CATAACTGTT TCCTGCTGAC AAAGGGGCG TGGTGATGGT TCNTGGGTC TTGGCCTCTT GCTAGCTGTC  
 ACAGCAGGAG GGTGGCTTTN TGGATTGGTG AAAGTGGTAT CCAGCCAGGT CCAAGAGAGA CAGGGGCGAG GTTTTNCCAA  
 TGCCAAATAT ACTTCAGCAG TAGAAGCCAC AAGATTACAT TATTAAATG TCCAAGAGT CCCCAGTGC AAACCCAGC  
 TGAACGCCAT TTAGTTATAT NCTGGTGGT TTTCTTCTG CAGGAATCA AACCAAGGTT TCTTATGTGT GCTTGAGTTG  
 GGGGCCAGAG TGACAACTGG TAGAAACTA TGTATTCCC CAGCTANGAG AACAGAGGGG AGGGGTACAT GATAGTAGGG  
 AGTCAAGTTT ACAA

SEQ ID NO:1095: (Length of Sequence = 387 Nucleotides)

GATCTGGCAA CCAATTATGT AAATAGTCAT ATGAATCCTT CAGAATGGAT AACACAGCTT TNCCTACTGG TGTGAAATAG  
 TTTTCAGGAG CTCATTCTTT ACTTCATTAG CTTATCTTAT ATCATTAGCT TATCTCCAT TCAGGTATTA CAGATCTTTT  
 TTTCTGATA AATATGGCAG TTTAGGGAAA TAACTATGG CATAATATGC TAGGCCATTC TTCTAGGCCA CGCTTCTTTG  
 ATTGTAACTT TAAACCTTT ATCAGAACCT AAACAACCTT TCAAAAGATC TATACATATT TNNATCCAAT GTTTAAGGCT  
 ATGAGTAATT CATATGGTC ACTCTTCATT TTNTCACCT GATAATGATC TCGNCAAAA TGTGAG

SEQ ID NO:1096: (Length of Sequence = 416 Nucleotides)

AACTTAAAGC TTTAGAATGA TTGAGGTAGC TCAGAGCAAA AACCAAAAGG AAAGGTGATA TGTAGATGTC TGGGCACTCA  
 CATCATAGGT TTGGATAGCT AGTTTAGGAG TAAGTGAAC ATTTTAGAAG AGCATTATG TTAACCTTGA CAATAGGATG  
 GGAGATCTT AACCCCCCTT GTAATATGCA CGATTGATT CTNAGTTAAA ATACACCACA GTGACAGTGA TATCATCCCT  
 GTACATCTC GCCAAGTCCT CTGGCAATGT CAGCATGCC GNCAGCCGCT CTGCCTCCAT CTCCCCATAC TCATTCTTCC  
 CGATGCAATC TCTGATCAGC CGCTGCTG CATTTTCTC AGCTGTGTC AGAGGCTG CTTCCTCTG CAGCAGCAGG  
 CTCGCAATG AGNCCC

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SEQ ID NO:1097: (Length of Sequence = 406 Nucleotides)

CTGACCTCGT GATCCGCCCA CCTCGGCCTC CCGAAATGCT GGGATTACAG GCGTGAACCA CTGCGCCCGG CATGATTGGC  
 ATTTTGGGCT AAATAGTTTC TGTCCACAGG ACCGTCITGT GCAGTGCAGG TCTTTTAGCA TCCTGGCCAC TCATAGTGCC  
 CGTGGTTCTC AGTAGAAGCT GTAGAGGATG TTGGGAAATT GGGGTGGGTT GGTCCACAGT CCTGGCATCT GTCTCAGGGT  
 AAGGGCTTNG GAGGCTCAAG TGCAGAGTCG TATCTGGATG CCAGCAACAC CCTGTTGAGA AACTTTCTAC TATGGTATGC  
 TCATCATCTT CTGAAGATGT CAGGGCCTGT TGTFTTGTTT GCGTGTTCCT CTCACTTTTC CTTTATAATC AGTTCTTCCT  
 TGTGG

SEQ ID NO:1098: (Length of Sequence = 326 Nucleotides)

GGCCCGCCCG CCTCGGCCTC CCAAAGTGCT GGGATTACAG GCATGAGCCA CCGCGCCCGG CCATGTAACA ACTTTTATAA  
 AGTTATGATG TGATGAGTTT TGGTGTAAAT TTTTCCCTC CTCTACCTAA AACCTTCAT GCCTCCCAT TGCTCTTAGA  
 AAACACTCCC CAATCTGAAA CATGACCATT TTTCGTTTTN ACACCCAGAT TGCTCCAGAC TTGGTCAGTT GGTGTCCCTC  
 CAAGCTGGTG CTGGTGTCTT TCCGNCATNC CCCTATTAGT TTTTGAGCAC CTGGACCAGT AAGGTGTTC A GTCTCACITT  
 GCACTT

SEQ ID NO:1099: (Length of Sequence = 342 Nucleotides)

GAAACGAAC AAGTTTCAGC AGTCTAGCCT TTGGATGACC TATTTGAAAA CCACTGAAAG TCGTGGAGGA ATGGGCAAGA  
 ACCACCTCAT GATTCTNCAG GCCATTGCTA ACGAACAGCT CATTGCTACA ACCAGTCCAG AGGTTTTATT CCTCTACTC  
 CGAGCAATGA AATAGACCTG AGTTATGCTT CCTTTCATTT AATTTCTGCA GATAAATAGT TTCTGAGCA ATGGATGCTA  
 TGCTTGATA CCACTCTCCA CTTTGACCGC CGGAACGCC TTGGGNCAC AGTTACAGAA AAAATGTAAA CTCAGAGTGA  
 TCCTTGTTGA TATTGCTATA GA

SEQ ID NO:1100: (Length of Sequence = 301 Nucleotides)

ATCGCTTGAG CCCAGGAGTT CGAGACCAGC CTGGGCAATG TGACAAAACC CAATCTCTAC AAAAAATACA AAAGANTTAG  
 TCAGGTATGG TGGGCATGA CTGCAGTCTC AGCTACTTGG TAGGCTGAGG TAAAAGGNTC ACCTGAGCCC GGGAAAGTAGA  
 GGCACAGTGA GCCATCATTG TGTGCCACTG GACTCCAGCA TAGGGAAGGG GACTGAGACC GTCTCAAAA AATTAAATAG  
 AAAGTCTTCT TTTTITAAAA TNCITCAATT CATGAGAAAA CTGCACTCAC ACATAGTGTG T

SEQ ID NO:1101: (Length of Sequence = 300 Nucleotides)

TTAAGTCAAA GGCTAGAAAT GATTAAACTT AGTGAAGAAG ACATGTCAAA AGCCGAGAGA GGCCAAAAGC TAGGCCTCTT  
 ATGCCTAACA GTCAGAAATG CAAAAGNAAA ATTATTGAAG GAAATTAAAA GTGAAACAAC CTTATTGCTG ATATGCAGAC  
 AGTTTTAATA TTCTGGATGG AAGATCAAAC CAGCCACATT TCCTTAAGTC AAAGCCTAAT CCAGAACAAA ATCCTAACTC  
 TCTTCAATTC TTACGANGGC TGAGAGAGGT AAGGAAGTTG CAGAAAAGTT TTGAAC TAGC

SEQ ID NO:1102: (Length of Sequence = 174 Nucleotides)

GAGATCGAGA CCATCCTGGC TAACACGGTG AAACCCCTC TCTACTAAAA ATCCAAAAA ATTAGCCGGG CGTTGCGGCT  
 GGCGCTTGIN GTCCAGNTA CTCGGAGGC TGAGGCAGGA GAATAGCGTG AACCTGNGN GGCGGGNTTG CAGTGAGCCC  
 GAGATCGGGC CACT

SEQ ID NO:1103: (Length of Sequence = 260 Nucleotides)

ACAAGGTCIT GCTATGTTGC CCAAGCTTGT CTCAACTCC TGGTCTCAAG CAATCCTTCT GCCCTGGCCC TCCCAAAGTT  
 CTGGGTATTA CAGGTGTGAG CCAGCACTCC TGGCCCATCA CAGTCTTAAA ACCAAAAGTT CTGTGTCCGA GGAAAACAG

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CGCTCGTNTG TCCACACAA ATGTTTAAGA AGTCACTGCA ATGTACTCCC CGGCTCTGAT GAAAAGAAGC CCCTGGCACA  
 AAAGATTCCA GTGCCCCCTGA AGAGGCTCCC TTCTCTCTGT GGGCTCTCCT AGAAAACCAG CGGGACGGCC TCCCTGCTGA  
 TACCGTCTAT AACCTTAGGG GGCCCTCGGG CAGGCAAACT CATCTCGGTG ATGGCTGTAG ATGCTAACAC TGGCCAATTC  
 AATGNCACAN CTACTGGTTA CCCCTTTTGA GGGGCATTTC TCCAGACAGA AGGCCCTTG AAGCCTAGGT AGGGCAGNT  
 CAGAGATACA CCCGTNTTIG TCTCGAAGGC TT

SEQ ID NO:1110: (Length of Sequence = 218 Nucleotides)

GTTTNTTCA TTTATNNCT CCCCATAAAA CAGTATGTAC AAGGGTTTGA TTCAGGGGAG AGAAAGGATA TATGAAGACA  
 CATTCTTCCC TCTTCTATTC TCTTACCTGG TTAGAAATAA ATAGGCATAT AGTCCNGTTT ATTATGGGCA GGAAGGTAGG  
 TAAAGATCAC CTAAGTNCIT ATGGCGTGT GCTTTTGCA CATGGAGAAT GAGTTTTT

SEQ ID NO:1111: (Length of Sequence = 211 Nucleotides)

TTTGCTTTAT GAAGAAGCTG GCCTAGGTAG GGTACAAAT GGGTTTTACT GAACCTAAAC AGCTAATTGC TACATCTCTG  
 AAAATAATCA GAATAGAAAA ATAGATGGAA AAATTTCAAA CCCACTGTAA GAGACTAACA TAAATCCAAT TCCAAAAGCT  
 GTTAATCATA CCATCTAAAA AGAAAAGTGT CGACTAATCA TGTTTITACA A

SEQ ID NO:1112: (Length of Sequence = 360 Nucleotides)

CCCTATAATA GTCCCGTGAA TAGGGCTAGC AGTGGGATTT TTGTTTATA GGCGAGGAAA TAAACACTCC TTTTGCTGAG  
 ACTAAAGAGC CAGGTTGGGG TCTCTGGACA CATAGTGCAA TCAAGGGAGG CTTAAGACAG CAGAGGCCCT CAGAGAAGAC  
 GTTCATTCTC CCAGCTACTT GCTAAGCAGC TNCOGTGTGA TCTGGGCAGT CCTGGGCACA CCAGTGGTGA AAATACATGG  
 TCTGCGCTGC CTGCGTGGAG CTTCTATTTT CCTNATGGGA GAATGCTGCT CCATTTTGT ATTGGAGGAA CTTTTTGCAA  
 GCAAAGCCIN TTTGGGGAAA AATGGCGGGC TAGAAACCTG

SEQ ID NO:1113: (Length of Sequence = 448 Nucleotides)

GCGGGTACTG CGTTAGTGAT TAGAGTTTTT NCCCTGCCGG AGGTGGGATA CACGGTAGCA TCATGGTOGA GGAGGTACAG  
 AAACATTCTG TACACACCCT TGINTTCAGG TCGTTGAAGA GGACCCATGA CATGTTTGTA GCTGATAATG GAAAACCTGT  
 GCCTTTAGAT GAAGAGAGTC ACAAACGAAA AATGGCAATC AAGCTTCGTA ATGAGTATGG TCCGTGNTTG CATATGCCCTA  
 CTTCAAAAGA AAATCTTAAA GAGAAGGGTC CTCAGANTGC AACGGGATTC ATATGTTTAT AAACAGTACC CTGCCAATCA  
 AGGACAAGAA GTTGAATACT TTGTGGCAGG TACACATCCA TACCCACCAG GACCTGGGGT TNNTTTIGAC AGCAGATACT  
 AAGTTCNGA GGATGCCAG TGATCAGNTG CACAGTCTTA GCGGTGGC

SEQ ID NO:1114: (Length of Sequence = 268 Nucleotides)

GGCGCCAGG TGGTGCCATG NICTTNTGNT CTGTGCGTGG GCGATGTGG TCATCAGCCT GAGACCCAGA TAGGCTGAAC  
 CCCGACTGAT GTAGGTTGCG CACAGGAGGG ACGGAGATCT TGCTGGGCA GGACGCGGG GCGGAGCGC CACTCCCTGG  
 CTTGGCAGGC ACCATCACCT CGTGGACGGG CCGTINATAC AGCCACGGG GCACACCGTG GNTTCTNCGN CAGCCTGTG  
 CGAGCTTTGA TCTCTTGTA GACAAAGT

SEQ ID NO:1115: (Length of Sequence = 342 Nucleotides)

ATCAGTGCCT TCTTCAGCTC TATCTGGGAC ACCATCTTGA CCAAACACCA AGAAGGCATC TACAACACCA TCTGCGTGGN  
 AGTCTGCTG GGCCTGOCAC TCTTGGTGAT CATCACTC CTCTTCATCT GTTGCCATTG CTCTCTGAGC CCAACAGGCA  
 AGAGGGGCCA GCAGCCAGAG AAGAAAAAGA AGAAGAAGAA GAAGAAGGAT GAAGAAGACC TCTGGTTCTC TGCTCAACCC

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AAGCTTTCTC CAGATGGAGA AGAGACCATC ACTGCCTGTT TAGTTAGGCA GGAANGCAGA GGIGTTTCTT TCTGGGGCT  
AAAGNCTCCT TCTGACCACA CA

SEQ ID NO:1116: (Length of Sequence = 416 Nucleotides)

CACCTTTGGG AGGTAGGGAT CATAGTTCCA CTTATTGAT GAGGAAACT GTAGTGCAGA GATGGCATAC ACTGTCCAAG  
AACATGGTGG TGGATGGAAC CCAAACCCCA ACTTTTGCTC CCATGINCTC TGTCCTCTGG CTATGGCTCT TGGCCCTGIG  
TACAGATACA GGCTCTGGAC AAGTTCACCA AATCCCTTAG GCTTCAGCCC CCTCATCTGC AGAATAGTGG CTTGGATTCC  
ACCATCTTCA AGGTCCCTGC CAGCTTTNAT TTATTAAAT TTGGATTTAT TAAGCAGGAA AAAAAGTAAT GGGAGTTTGT  
GGGTACCAAT GGATTAAAGG GGGTNAATC TGGNGGCTNG TGAGTAAAT TAGGGTCCCC AAATGG

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AAGGACCGGG ATTCTGATGA AGCGTGTGTT CTCCTGCTT GAAGTTTCCC TTTGGAGTTC CAAAGTAAAG GACACATAAG  
CAACACTTCC AAAACAAGG GAACAAGGTG GTTATTGTGA AAAACAGGAA ATGGTGCATG TCATTGAGAA CTATTTTAAT  
GCAGCTATGA AAAGGGAAAA AAGTGCCAG TTTCTGATTT CTTAGATACT GAAGAGGAGG TAGCATTTC TTTATCAAT  
ATAAGGAAAA TTATTCACCA TTTGAAGCT CACCTTAGAC TATGAAAT ATATTCACTG CAGAGCAATT ACTTCTGTCA  
TTACCTGAAG TGATCAGTAT CTATCTTCTT TGTCATAGCA TGCTCTCTC AAAAAGGCT CCACTCTTT CCTCACATC  
TGTTGTCATC ATGATT

SEQ ID NO:1118: (Length of Sequence = 379 Nucleotides)

GACAGCAGCG TGTCCAGGC GGCTGTGGAG GGTTCGGGA AGCTGAAGGA CCTAACTGC CCTTCTCTG AGGGTCTGTA  
TATCAGAG CCAAAGACAA TTCAGGAAT GCTGTGCAGC CCTCAGAGT ACCGCTTGA GATCCTAGAG TGGATGTGTA  
CCGGGTCTG GCGCTCACTG CAGGACAGT TCAGCTCACT GAAAGGGGTC CCAACAGAGG TGAAGATCCA AGAAATGAGG  
AAGCTGGGCC ACGAGCTGAT GCTGTGTGG CCAGATGACC AGGAGCTCCT CAAGGGCTGT GCGTGGGCC CAGAAGCAAG  
CTACACTTCA TGGACCAATT GCTGATACC ATCCGGAGGC CTGACCAATG GGTGCTCCA

SEQ ID NO:1119: (Length of Sequence = 233 Nucleotides)

CAATATTCAA GAGTCTTTAT TGAAGACTTG AGATGGGACT TCCAACCTAG AGGATGTGGG AATCCAGCT CAAATGATAC  
AGGATAAAT GGGATGGGCT AGGATGGACA GGTGTGGAT ATGGGAGTCA TGGGTCAAAG TCTTATCCA GATGGCTCCA  
GGTACAGTGG GCTTCTGGG CTGGAAGCTG GGTCTCCCC ACTTCATTCT GCTCAAAGCT TCTTGAAGGA GCT

SEQ ID NO:1120: (Length of Sequence = 325 Nucleotides)

GAAAAACAA CCATACCTT NCTTTTGAGG AAAACTTACA AACTTTATTA AGAATAACA TGAATCINCT TAGAAAGTTC  
CAAGATAACA TACACAACTG ANTCACCTCT TCATATATAG GCACCACACA CATAAAGATG TAGCCTAAAT CACAATCACT  
TCTCACCAGG GATGGAGATA GGAATTTACA TTCTTGACTT CATTAAGTCT CTAATTTGGC AAAACCTCC AAGCCTTTTA  
TACACATGCT GGTGTAGGC CAGATCTCAC TCATTCTTAT AATTGTGCAA ATAATATGGA GACCAAAAGG GCAGGGTTTT  
CATT

SEQ ID NO:1121: (Length of Sequence = 161 Nucleotides)

ATTAGTATTT TGTCTGTAT GTCTAGCTC TGTTCAACAA CAAATTTTNC TAGTCTTGT TTATTTTAT TTGTATAC  
ATGGAAGCAC AATGTTATAA GGAAAGGTAA TTTTAAGCTA ACAACCACTG CACAGCCTCA GGTTTTAAAT TACAACCACA  
G



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SEQ ID NO:1122: (Length of Sequence = 181 Nucleotides)

CATCTTTTITA CATCAAAGTA CTACCAAGTA AAGAATTAA AAATTACTTG TCTAGTCATG ATATATTTTC CTNCTGCTGC  
TGAAAAATCC CTGCTTATT ATTTTCATGTC CCTTTATCAT TCATTGATG AACTGACAG CACTTGCTG AACAAGTTTA  
AGAATAGCTG ATATTTACTG A

SEQ ID NO:1123: (Length of Sequence = 174 Nucleotides)

COCTAGAGTT AAATTTTACC CATGAAACAT CAGCCACATG TCATATCAAT TCAAGTGTGT AACATTGATA TAATCGGGTA  
CACCACAGCA GCACTGACAG AAACAGAAAT GATTGAGAGA AAGCCAATTA AACAGCCAG GGGATAAAGC AGATCTGTAT  
GACATTAGCT TTTT

SEQ ID NO:1124: (Length of Sequence = 232 Nucleotides)

CTTTTAGCAG AGACGGGGTT TCACCATGTT GGCCAGGATG GTCTCTTGAC CTCGTGATCC ACCCGCCTCG GCCTCTCCAA  
GTCGTGAGAT TACAGGCATG AGCCACCGCG CCTGSCCCAG GGAAGGCATT TTINAAGAAA TAATAGTTGA ATTGAGATCT  
GATAAAAGAA GTAGGAGCAA AATNGGGGGG GTGCAGTTTT CCAAGAAGAG AAGACAGTAC ATATAAAGGG CT

SEQ ID NO:1125: (Length of Sequence = 233 Nucleotides)

GATACTATGG GTTCAGTGAC ATAGAGACAC AATTGAATTA GCAATGAGCT TCACTCAGGA GCCAGAGAAT GGGTTTNTNT  
CTAAGAGATG TTTTAAAGTAA CATTTAAATG GCACTGCTGA TTGATACCAG CATCAGGAAG CTGAGGACAA GAGCTCTCTG  
AGAAGGAAGT TGCCATATTA CAGAAGTGAG GTGACCAAGC ACTTNTGTGA GGTCTGTACA TTTAGACATT AAT

SEQ ID NO:1126: (Length of Sequence = 258 Nucleotides)

TTTTTTTTTT TCTTAGGGGC CGCAAGACGG CTAATTTATT ATAATTCTC CGCCGAGTT GCCTCTGGC GCCA...JHGGC  
AGAACGGAGC GCCCGGGATG CAGGAGGAGA GCCTGCGAGG CTCCTTGGGT AGAACTGCAC TTCAGCAATA ATGGGAACGG  
GGGCAGCGTT CCAGCCTCG TTTCTATTTA TAATGGAGAC ATGGAAAAA TACTGCTGGA CGCACAGCAT GAGTCTGGAC  
GGATTAGCTC CAAGAGCTCT CACT

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GTGTGAATAG GCAAGCACTT TGTGTGTGT ACTAAGGAAC TCAAAATGAT AGGCTTTTTG TCACCATGTG CTTCCAGGNT  
CTCTGTGCA TGAGCAGAGA TAGAGGATCT TGCACAAACA ATTAATGCT CTAGCCATAA GTAGTGCAAG TTTCCNTTGC  
TTGAAATTTA CTGCTGATAG CCACTTGGNC ACACCTTACT TCCAGAGGCT AGGAAGTACA GTTTTCCAC AGTCTAAGAA  
TGAAAGAGNA TTAACCACAG TAATGCATAG CACTCATAAC ATGGATGACT GGATAATTTT AAAAGAATGG GAATATGCAA  
G

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ACAGCTCAAT GACTTATCAC AAAGCAAAGC CCAAGAAGT CACCACCCAG CTCCAGAAAT AACACATTGA AAAGCTAGAA  
AAATCTCAAA TTGACATCCT AACACCACAA CTAAAGGNTC TAGAGAACCA AGAGTAAACA AACCACAAAG CTAGCAGAAG  
ACAAGAAATA ACCAAGCTCA GAGCAGAACT GAAGGCAATA AAGACACAAA AAACCTTTAA AAATAGTCAA TGAATCCAGG  
AGCTGTTTTT TTGAAAAA

SEQ ID NO:1129: (Length of Sequence = 163 Nucleotides)

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CAGTGGTACA GCAGCAGCAG ACACGCATCG CAGAGCTGGA GAAGACGTCA GCTGAACACA AACACCAGCT GGCGGAGAGA  
AGCAAGACAT CCANCTGCTA AAGGCATACA TGCATGCAAT CCGCAGTGTG AACCCCAACC TTCAGAACCT GGAGGAGACA  
ATT

SEQ ID NO:1130: (Length of Sequence = 382 Nucleotides)

TTTTTTTTTT TTTTTTTTTT TTTTTTTTTT TTTTACTGT TCAAACAGCA ATGTTTAGTT GTACAACACA TAAAGTCTAG  
CAACAATTAC AGGNCCAGTT TGAGTGTCTG TTTGCTTGT TTCAATTGGG AAATTTAACT GTATGTTCAC CGTAAGATTG  
GCTGGGACTG GTAAACATTA AGAAACGGGT TGINCTTGA TCCCCTAGGC GTGGGCTCT TGCTCCATCA GGACTTGGTT  
GTAGATGAAT GGCCACAAG TCACCAGCCT TTGAGCAAGT TGTGTCCAGG TGGAGACAGG AAGAGGGTGG GCAAAGGGGA  
ATTCTATAAA GACACAGTGT NTGGGGCAGT GGCAGTCAAC ATTCCGAAAC ATTCATGCAT CT

SEQ ID NO:1131: (Length of Sequence = 406 Nucleotides)

ATGCTAATTC AGGCTCCACA GATAGINCTG GTGATGGSGT TACATTTCCA TTAAACCAG AATCCTGGAA GCCTACTGAT  
ACTGAAGGTA AGAAGCAGTA TGACAGGGAG TTTCTNCTGG ACTTCCAGTT CATGCCTGCC TGTATACAAA AACCAGAGGG  
CCTGCCTCCT ATCAGINATG TGGTTCITGA CAAGATCAAC CAACCCAAAT TGCCAATGCG AACTCTGGNT CCTCGAATTT  
TGCTCGAGG ACCAGACTTT ACACCAGCCT TTNCTGATTT TGGAAGGCAG ACACCTGGTG GAAGAGGGGT ACCTTTTTTG  
AATGTTGGGT CACGAAGATC TCAACCTGGN CAAAGAAGAG AACCAGAAA GATCATCACA GTTCTGTAAA AGAAGGTGTA  
CACCTG

SEQ ID NO:1132: (Length of Sequence = 400 Nucleotides)

ATTTTGGGT ACTTCAGGCA GGAGGGTAGA CATAGCACTT ATCTGGATTG GATGTAGCCA CAGGATTAGA ATTGTTGGGT  
CATAAAATAT GTACATGTTT AGCTTTAGTA GATCTTGCCT AGAGTTTAAA AAATTAAAAA TTAAATATT TTTTAAATTA  
CAATAAATTC AGCTAATTTT AATTTTAGAT AATTTTATA ATGTAGTGA TCITGGTTT AACCAGAGCA TGINGCTGGA  
TTTINCTCCC CAATCGAACA CAGTAGAGAG AGAAGGTGGC GGGTTCTTAG TGATACCATG CACTTTTTTT TAGAACTTCA  
GTGCTGTATC CTTTCATTTA CAATGTATGA TGAAAATAC TAAAGAAGGG ATNGTGGTGG TGTGAGGGA GGCAGGAGAG

SEQ ID NO:1133: (Length of Sequence = 347 Nucleotides)

CCCAGGGCGC GCCATCCATG GACGAGCTCA TCCAGCAGAG CCAGTGGAAC CTCCAGCAGC AGGAGCAGCA CTTGCTGGCG  
CTCAGACAGG AGCAAGTGAC AGCGGCCGTG GCCACGCGG TGGAGCAGCA GATGCAGAAG CTCTGGAGG AGACCCAGCT  
AGACATGAAC GATTTTAAACA ACCTCCTGCA GCCATCATC GACACGTGCA CCAAGGACGC CATCTCGGC GGAAGAAGT  
GGTGTTCAG CAATGCCAAG TCCCSCCGC ACTGTGAGCT GATGGCGGN CACCTCCGA ACCGCATCAC GGCTNATGGG  
GGCACACTTC GAGCTGCGGC TGCACCT

SEQ ID NO:1134: (Length of Sequence = 389 Nucleotides)

GGTCCAGGCC TGCAAGACTT GCCTAGTGAG AAGATATAGG AATGGGAACC CAGGTAACAG TCTGGCCACT TTNCCATAGG  
GCTGCTGCAG TATGCCAGG GCGGCTCCA GTCTCTAGTA GCCTCANATT TTCCAGTACC TGGAGTTATC ATCAGTGAAG  
CCTGTGAAC AGCAAAGATG GCAGCCTACC GTCCTTTTG GAAGCTTTGC CTTAGGGAGG TATGAATGAN CTINTTGCTG  
GTCARACAC ACCTGTAGGA GGTGGCTGGA GACCCAGTT TGGAGTTT TCCCTGTAG GAGGAATGCC ATTGGAAG  
TGCTTAAAA AGCAGTCTGG GCCTCATTTT TATAGAGCAG CTGTGCTAAT GCTGAGGGGT CCACAATCA

SEQ ID NO:1135: (Length of Sequence = 402 Nucleotides)

GCAGAGGCTT AAAGAGTGCT TATTCAGTGA GGCTTGCCCT TNCCTACTCC TTCCTGGGAA CCCATTGGC AACAAAGTGAA  
GAAACCTAGG CCAGCCTNCT TGAAGATGAG GGACCAACCG AGAGAGAGGC TCTGCTGTCC TAGCCCTCCC ACAGAATAAG  
TAAGCCTAGC CAACACCACG TGGAGCAGAG ATGAACCATC TCAGTTGAGC CCAGCCCAAA TTGCTGACCA AAAGAATTGG  
GAACAAATAA ATAATTATTG TTTTAAGCTA CTGTGTTTCT GGGTGGTTTT GTATATAATA GTAGCTACCT GATACATTGG  
GATGACCCCA ATTACTTGAA CTTCTCTTAG GCTGTGTTTA TCAGTGCAA ATAGGGGATA ATTTTAGTAA TTNGGGGTG  
CT

SEQ ID NO:1136: (Length of Sequence = 381 Nucleotides)

CAGGTGCGAG CCACCACGCC CAACCAGAA CTCTTTTAT TTGCAAAAT TGAAATTCTA CCCATTAAAT AGCAACTCTN  
CTTTTCCCTT CTCCCCAAG CCCTTGSCAA CTGCTTTTCC ATTCTATGA CAATGCTAC TCTAGATACC TCATAGAGGG  
TGAATCATAC AGTATTTGTC CTTTATGAC TGGCTTATTT CACTTAGCTG CTATATTATT AATACCAGCT TTCTGGGGAT  
ATAATTCACA AACTGCAGAA TTGAATGGTT TTNAGTCTAT TCACATOGGA TAGTTTTTG AAGAGACAGT AAAACCAATC  
CTTTTTCTT TAGGTCTCA GACACACACA TGCTTCTTTA TCTGGCAAGT CCCGTTATAA A

SEQ ID NO:1137: (Length of Sequence = 325 Nucleotides)

TATTTTTTGT ATAGACAGGG TCTTGTTATG TTGCCCCGAC TGGTCTCGAA CCCCTAGTCT CAAGCCATCC CCTGCCTTG  
GCCTTCATT CCTCTACTTT ATACCACGGT TATTCACCAA GCTTGCTTTT GTTCAGTGTA CTCTCTCATG GAAAACTGA  
GGTGATATTT ACCCTGGTTT TTCTACCACT GTGTAACGT CGCTAGTACC AGCTCAAAAA ATAAGAAATG AATAAATGAG  
TGATGACTAT CACTATGTTG CTCAGGCTGG ACTTGAACCC CTGGGTCCA GTGATCCTCC CGCTCAGCC TTCCAAGTAG  
CTGGG

SEQ ID NO:1138: (Length of Sequence = 422 Nucleotides)

CAACACACAT TAGCCTTAAC AACAAAGAGC TAATCTTATG TAAAGAACTC TTACAATTCA GAAAGAAAAA GATCCTAGTG  
AAAATGTGGG CAAGAGATAG CAAAAACCA GCCATATGAT AATAATAGTC AATAAGTGAA TCTGAATGAT GTTATCTNCT  
TTGTTCATT TAGAATAACA AATAAAATG ATGATGAATG CACTTGCTTA CTAAATTAGC AAAANCTGGG AAAAGATGAT  
GATATTCAGG GTCAGATAAA GGGAAAGGG TGCCCTTCTA TTGCAATTG GAAAGTAAAT TGGCACTGAC TTTTAGTGGG  
GATAGTCTTG TAATATGGGT CAAANGTCTT CAAATCGTGT CCACATTTTG GGGCTGCAA TTCCACTTCT AGGGATTAT  
TCTAAGGAAG TACCTAAAAA AT

SEQ ID NO:1139: (Length of Sequence = 367 Nucleotides)

ATACCGAGAA GCATGCAAGC GGTGGCTCCA CGTCCACAT CCATCCCCAA GCTGCTCCTG TTGTCTGCAG ACACGTTTTG  
GATACACTCA TTCAATTGGC CAAGGTATTT CCCAGCCACT TCACACAGCA GCGGACCAAA GAAACAAACT GTGAGAGTNA  
TOGGGAAAGG GGCAATAAGG CCTGTAGCCC ATGCTCCTCA CAGTCTCCA GCAGTGGCAT TTGCACAGAC TTCTGGGACT  
TATTGGTAAA ACTGGACAAC ATGANTGTNA GCGGAAAGG CAAAGAACTC CGTGGAAGTC AGTGCCAGTG ANGCGCTGGC  
GGTGAGGGGG TAAACCTTTT NCATACAGCC TTGAGGCCT CTCCACT

SEQ ID NO:1140: (Length of Sequence = 412 Nucleotides)

ATCCAAGGA TATAGGCAAG CATCAGATAC AGCCAAAGCA TTCTTTTCT AAAAGAGTCT GAACGCATCT NATGCAACAC  
CCAAAAGTAT CCGTTTNTCT CTGGTTACAG TAGTTTTTCC CTTTCGATA NATCAATCT TATTAACAA TATATGGLA  
AATATCTTAC AAAAGGAAGT CATTTCATT TTCTAACATC TTTTACATTG CACTAATTAC ATGGTTTAAA TGAATATCCC  
TAATCTTCAT CCAACTACAC CCCATGAATT TNAGGTTTAT TTAATCAACC TAGTTAGACC AGATATATCC TTCTAAATC

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ATTGTAGAT AGAGGATTCT CCTTTTGTCT AGTAAATACC ATTAACATAT TTNCAGANGG CCTGGTCTAG GGTCAATTAT  
TCCAGGGCCT CT

SEQ ID NO:1141: (Length of Sequence = 410 Nucleotides)

GTTAACCTGT GGCGGCTCC GGTATCCGG CGCTGANGT TTTAGCTGCG GTGGCGGCGG CAGTCGGGAC CGACTNAAGA  
TGTCATTTGT CAGAGTGAAC CGCTGTGGTC CCGANTTGG TGTAAAGAAAG ACACCGAAAG TAAAGAAGAA GAAAACTTCA  
GTGAAACAAG AATGGGATAA TACCGTGAAT GATCTAACCG TTCATCGGGC AACTCCTGAA GATCTGGTAC GCCGTCATGA  
AATACACAAA TCGAAGAATA GAGCAATTAGT ACACTGGGAA CTCACAGAAA AAGCTTTGAA GAGAAAATGG AGGAAGCAGA  
AACCAGNAAC TTATAATCTT GAGAAAAGAA GATTNGTCTA TCATGAAGGA GGNITCTTTC TGATCAATAC CAGATGCAAA  
GATGTGTGG

SEQ ID NO:1142: (Length of Sequence = 392 Nucleotides)

TTTTTTTTTT TTTTTTTTTT TTTTCNGGG ATTGAATGTC TTTATTAAAT AAACGAGTAA ATGGTAGCAC AAATCACCAT  
CAATATTTTT GGAAGGATTG GGGACAAGAT GTGAGTTCAG AATATAATIN TCATTTTCAG GGTCTCAATG TAGCTGAAGA  
ACTGTGCCCA CTGATCAGTA TTACGTATTG CAAATGCAGG AGGTAAGSCT AAAATAGGAC TTATGCCGTT CAGAAGATTG  
ANTTTGAAAC CTTAAAACT ATCATAATAG TAGGAATGCA TGTAAAGATT TGATAACTTT CTTTAGCTAG AGTTTTCAAC  
CCACAGTTAG GAGCAAAGTT GTAAAGTGAG TAGGTINTGAA GAAGGGACAC TCITTTGAGA AAAGAAATIN GC

SEQ ID NO:1143: (Length of Sequence = 200 Nucleotides)

ACTTCCTCTC TCCTGGCATC TGCTATAAAA ATAAGAAGGA GCAAATATTC TTGCCTCTTT TTATCACCTG ANCTGAAAAC  
CCATTGTAAAC TGCCATGAAA ATAAGCACTG GTCCATGAGA CCAATGCCCA GAAAAATCAG GCTAAGATTC CTGGAAAGTG  
GGCTGTGGGC ATTATTTTAA ACACACACAC AAAATTAC

SEQ ID NO:1144: (Length of Sequence = 333 Nucleotides)

AACAGAAGCA TGTATTTC A TTCCATTCC CAGAAAGGGA GTTAATGAAG ATAAAAATTT ATTTTTTAAG GTCTTTATTG  
AGAGAACTT TGTTTCTGA TATGAACAT TGCAGATGTT TTTATAAATA CTTTCATTAA AATGATGTAA ACAGTAGTAC  
CCAACACTGT AACTCAGTG AAAATAGTAA ATGATCTTTT TATTACTAAG ACTGTCATGC ATTCTGAAGC AGFTGGCTTT  
TTTTTAACCA TAGGAAGTCA TTTCCCTCTA GCTCCTTCCC TTCTACTCTC CTGCTCAGAC CATTAGTAGG TACTTTGTTA  
AATAAAAAAC TAG

SEQ ID NO:1145: (Length of Sequence = 225 Nucleotides)

TGGGTTTCTG ATCCGAGAAA AATTGAAAGA CAAACATGGC TGGGGGAAGC AAAACGCTGA CACACAATTC AGGTGGCCCA  
GCAGTGCTGA OCTGCAATCC ACCCCACCCC AAGGCAGCCC TTTCAATCCA AAGTGGACAG AGTGGGCCCT ATCCAGANT  
CACTCAGGAA GCTTCTTCAA ACATATGACT GCCACACCCG CCCCAGGT TCAGAAACAT CTTG

SEQ ID NO:1146: (Length of Sequence = 223 Nucleotides)

AAGGNACAAT ATTATTCTAA ATAATTAGA TTTGGAAGAC ATCAATGACT TTGGAGATGA TGGGTCTTG TATATTACTA  
AGGTTACCAC AACTCAGCT GGCATTACA CCGCTATGC AGATGGCTAT NAACAAGNCT ATCAGACTCA CATCINCCAA  
CTGATGCTC CTCCAGTCAT CCGGTGTAT CCAGACAGTC ACCTAGAGA GCTTGGGTA ACT

SEQ ID NO:1147: (Length of Sequence = 389 Nucleotides)

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ATTTCACTGG CCATTAAGAC CCTGAAAGTT GGCTACACAG AAAAGCAGAG GAGAGACTTC CTGGGAGAAG CAAGCATTAT  
 GGGACAGTTT GACCACCCCA ATATCATTCG ACTGGAAGGA GTTGTACCA AAAGTAAGCC AGTTATGATT GTNACAGAAT  
 ACATGGAGAA TGGTTCCTTG GATAGTTTCC TACGTAAACA CGATGCCAG TTTACTGTCA TTCAGCTAGT GGGGATGCTT  
 CGAGGATAG CATCTGGCAT GAAGTACCTG TCAGACATGG GCTATGTCA CCGAGACCTC GCTGCTCGGA ACATCTTGAT  
 CAACAGTAAC TTGGTGTGTA AGGTTTCTAA TTTCCGACTT TCGGTGTCC TGGAGGATGA CCCAGAAGC

SEQ ID NO:1148: (Length of Sequence = 386 Nucleotides)

ATTAATGCT TGCCATCATG AGCAGAAGCA AGCGTGACAA CAATTTINAT AGTGTAGAGA TTGGAGATTC TACATTCACA  
 GTCCTGAAAC GNTATCAGAA TTTAAACCT ATAGGCTCAG GAGCTCAAGG AATAGTATGC GCAGTTNATG ATGCCATTCT  
 TGAAGAAAT GTTGAATCA AGAAGCTAAG CCGACCATTT CAGAATCAGA CTCATGCCAA GCGGGCCTAC AGAGAGCTAG  
 TTCTTATGAA ATGINTTAAT CACAAAATA TAATGGCCT TTTGAATGTT TTCACACCAC AGAAATCCCT AGAAGANTTT  
 CAAGATGTTT ACATAGTCAT GGAGCTCATG GATGCAAATC TTTGCCANGT GTTCAGATGG GGCTAG

SEQ ID NO:1149: (Length of Sequence = 364 Nucleotides)

GGCAACAGGG TGAGACTCCA CCTCAAAAAA TAAAAAAA GAAAGATATT ATTCAAGAAA AGAAGTTAGG AGCCAGGTGC  
 AGTGGCTCAT GTCTATTATG CCACTACTTT GGCAGGCCAA GGCAGTAGGN TCCTTGAGG CCGGGAGTTC AGAGACCACT  
 CTGGGAAACG TAGCAAGACC TCGTCTCTAC AAAAAAGTG TTTAACAAAT TAGCTCAGTA TGGTGGCACA TGCTGTAGT  
 CCCACCTACT CAGGAGGCAG AGGCAGAAGG ATGGCTCGAG CCTTGAATT CAAGGCTGCA GTGAAGTAAG ATGGTGCCAT  
 TGCACTCGNG GATGGGTGAC AGAGCAAGAC TCCATTGCCG CCAG

SEQ ID NO:1150: (Length of Sequence = 267 Nucleotides)

GACAGGTGTA ATCTAAGCTT AAATAAACCC CCCGAGGCT GCACAATTNC TTGGCATCTC TCCCCTGCCC TCTCCATCCG  
 CATATTCATT TTGGAGTTTG GAGAAGTATC TAGAATCINC TCCCACCCCA AAATGCCAG CAGAGCCCCC CCGCGCCCC  
 CGCACCCCTT GGAGCTGCGG CTGCTGAAT CGTTGAGATG TCTGANACTG TGGGGTCC CTACCTAGTG CTTCAACCAG  
 ATCACCTCAC TTTTGAGTTT CTTTCT

SEQ ID NO:1151: (Length of Sequence = 386 Nucleotides)

GGAAGACGAA GGAGGAGTAA AGGCATGINT CACATGGCAG CAGGCAAGAG AGCGTGTGCA GGGGAAGTGC CCCTTATGAA  
 ACCCTCAGAT CTGCTGAGAC TTATTCACCTA CCATGAAAAC GGCACAGGGA AAACCTGCC CTAAGCTTCA GTTACCCCCG  
 ACAGGTCCCT CACATGACAC ATGGGGACTA TGGGAGCTAT AATTCAAGAT GAGATTGGG CAGGGACACA GCCAAACCAT  
 ATCAGATACT TACCACATTA GACACTGACA GACAGCTCAC CACAGATTCT GGGCTCTATT CAAGGTGTTG ACTTTGATCT  
 TTTTCCAGTT GTAAATGTTT CATCCAAAAA AACTGTGATT TTGGCATAAC TTTTTCAG AGTTGC

SEQ ID NO:1152: (Length of Sequence = 239 Nucleotides)

GCAATCTTTT GAGTGACTTA CTTTGAGTCT TTGTACCTT TCCTCTGATT TTTTCACATG GTTTAACTCA GTGTACCCAA  
 GAGTACTAGG TGCACTCAAT TCTGCTATTA ACTCTATAAG CAAGTNCITA AGAAAGTTAA TGTAAAAA TAATCTTAA  
 ATTGTCTTGA TAGGAAAAAT GIATTTGAAA TTAATAAAAA TTCTTATGTT GACTTCTTGG TTTTGAAACA ATGAATATA

SEQ ID NO:1153: (Length of Sequence = 275 Nucleotides)

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CAACCTCCTC TTCAGTGTC AAAAAGCCAC GGTTAGACCA GATTCTCGCC GCCAACCTTG ATGCAGATGA CCGTCTAACA  
GATGTATGTT TIGTTTCCTC CTTCATCTC TAATAATTGA TTTACCATGT TTTCTAAAA TACTTGTTAT GTCCTTNCCT  
TAAGAAGTGA CATATATTGA TGTTTAGTGA CTGTTATCTA AATATAGCCC TGACCTCAGT GCTAAACTTT ATAGTTGATT  
TTAAATCAA AAGTATTATT TTGTTGGGACT TTAAG

SEQ ID NO:1154: (Length of Sequence = 203 Nucleotides)

CCTAAATCTT AAACCTTACA ACAGTTAAAT AAGACCCCTT TCAAAGGGAT TAACACACTG AATATTATAT ACATACAGAT  
TTATATTTAT GCGCTATACA CATATATGGN CTTTATCTGT ATATAAATAT GTGATGATAA TGATAAAAGG ATAATGATTA  
CACGTAGGAT AAACATTTAT CAAAAATTGT ACTATAAATA ATA

SEQ ID NO:1155: (Length of Sequence = 343 Nucleotides)

GAAAAACAAA CACTAAGCTA TTTTGGAAAC ACTGTTCTAC ACAGAAGAGA GCTTCTCTTA ATTTAAAAA AAAAAAATC  
CCAAATAGGC ATTTTTAGGC ATTAACCAA AAAGAGAATC CAAATGAAAT ATTATACTTG ATGTTCAATT TTAATAGCAT  
CTTGATAAG GTATGCTTCC TTTCATTTGA NTACATTTCT GNACATGTAT GTTATAAAAT CCAGGTAACA GCCAAACCAC  
AAGTTAACTC TTAACAATGA ATATACATAG TTAACCCAT AGTAAGCAGC CCCTTTGAAA AGCACTGATG CACCCAACAN  
TTATATGGTT CCATTCATA AGG

SEQ ID NO:1156: (Length of Sequence = 396 Nucleotides)

CCCACCAATT GCCATTAAAC CTCCCAATCT TTAAGGGAG GNTCTCTACT TACTGTTTCA AGGCAAAAAG ATGATTAANC  
TATCTCATAT GGTGTGAATT TGGGCCATAA ATAAATGACT CTAGTGGTAG CATTCATGT AGGCAGGTCC AAGGAAGACA  
GATTGTAGA CAGAGTTGGG AAAAGGGTCA AAGAGCCAAT GAGTCTCCCT ATCCTGAGGG ATGCCTTGAC GGAGCCACAG  
CATGANTCA TGTTTTCCTG AATCCATCTC AGTTCATGTG ACAGGATGGA AATGCTTCC TTTTAGCCA GTGTTGCTTG  
TAACGAGTTC CCTGCAGCTC AGGGAAGGGA GCAACATGTA CTGCTTTGTT GCTTCCTGTA TAGAGAAGGC AGGAAT

SEQ ID NO:1157: (Length of Sequence = 269 Nucleotides)

CAGGTTCTCA ATCGTCTCC CAGGCTGGAG TGCAATGGCA CAATCTCAGC TCACTGCAAC CTCCACCTCC CGGGTTCAAG  
TGATCTCCT GCTCAGCCT CCTAGTAGC TGGGACCACA GGCACTCGCC ACOGCAACCA GCCAACTTTT GTATTGTAG  
TAGAGACAGG GCTTCACCAC GCTGGCCAGG CTGGTCTCAA ACTCCTGACC TCAGGTGATC TGCTGCCTC GGCTCCCA  
AGTGCTGAGA TTOGGGCTG AGCCACTTG

SEQ ID NO:1158: (Length of Sequence = 190 Nucleotides)

CTTATTAGTT AATTCACGG CAGATTITCA TTCTATCGA ATATATTATA TGTAGAACT AGGGCCTTAA ATAATTAAGC  
TGACTTTCCT TATTAGTTAT TCCTTAAGAT AAAATTATGC TGTGAAAAT NACTGTNGAA TTTCTCAAGA AATTAAGCTC  
TATAGAGGCA TAAGTAATCG AAAGACTTTT

SEQ ID NO:1159: (Length of Sequence = 340 Nucleotides)

GGGCACTGAC TCTCTGGGAG TGTAAGCNC TCACCTGGAC CCCACAGCCA GTGAGCAITA GTGCTTATAT TCCATCTCC  
AAAGCTCTTT CTTCATACCA GACCACAT GTGGCCCAAG GAGGGATATT TACTCTGCAC TTTTAGAGTT CTAGAAAACA  
TTGTTTACTG GTCTGGCATC ATCTATATT ACTTGGCTTG ATTGGGATA GAGTATATC CTCTCTCTG ATGAAGGAT  
TTTATAGAGT TAACCTTATG GGGTATGGG ATTATGGA TTATTTCCAC CCTTAAATG ATTTTGTGGG GAAAAAAGT  
GTACTAATCC CTAATTAGG

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SEQ ID NO:1160: (Length of Sequence = 215 Nucleotides)

GTAAACAAAT CAATTACAT GATTATCCCA GACCTTCTT TTCTTACTGG AAAAAAGAGG GCATTAAACT GGATGATGAC  
 AATAACACCA TAACTACAAG CTTTATAAA AGTCCTTTAT ATACAGTGTT AATACAGTGA AAGNTCAACC TTATTGAAAG  
 AGGTCGGCT TCTGCCCTCA GCTACTGGGA AACAATCACT AGGCCTCTGG CATGT

SEQ ID NO:1161: (Length of Sequence = 298 Nucleotides)

AATCTTTAAA ACTACTTIGA ATCTTATAGA AACATCAGAA TCCTTTGAAT TCAAAAGAAG CCAGGGACTC TAGCCAAAGT  
 GGAGTGGTTT TTTAACTCAA GGATTTAGGA CCTTGGCTGA ATACAAACAT TGAATGATTA CTCAGTAGGT GCCAAAGCTC  
 AGGACTTTAG ACAGAGTCAG AGTCCAGTTT GTNCTGAAAC ACAATTTGAT TTCAACTATT GTTTTAAGTG AGAGAGGAAA  
 GTGACATTAT TATGAGTGTA AATTNCTGC TTTTAAAGTA GAAGTTACTG ACAATGA

SEQ ID NO:1162: (Length of Sequence = 163 Nucleotides)

GAAATAAGAA ACAGCTTGTA TATAACTAAT GCCTTGAGGG AGAAATTCAA ATGGCTATGA AAAAATATTT ATAATTCAAT  
 GATAATAAAA ATCTTACACG TTAAACTTG AGAATGTAGT TAAAGCAATA CTTGGNCATA ANCTTAGCAC ATATTAGTAA  
 AGA

SEQ ID NO:1163: (Length of Sequence = 393 Nucleotides)

GCCAACACCA GGAGCATTTT ATTACAGATGT TAAATGAACC AGTCAAGAA GCTGGTGGTC AAGGAGGAGG AGGTGGAGGT  
 GGCAGTGGAG GAATTGCAGA AGCTGGAAGT GGTATATGA NCTACATTCA AGTAACACCT CAGGAAAAAG AAGCTATAGA  
 AAGGTTAAG GCATTAGGAT TTCCTGAAGG ACTTGTGATA CAAGCGTATT TTGCTTGTA GAAGAATGAG AATTGGCTG  
 CCAATTTNCT TCTACAGCAG AACTTTGATG AAGATTGAAA GGGACTTTTT TATATCTCAC ACTTCACACC AGTGCATTAC  
 ACTAACTTGT TCACTGGATT GTCTGGGATG ACTTGGGCTC ATATCCACAA TACTTGGTAT AAGGTAGTAG ATT

SEQ ID NO:1164: (Length of Sequence = 260 Nucleotides)

TGCACTCTTG CCTCTTGAC AAGTCTGCT TCTTACAAA GGACTTTGCA AGTNCCTCAC CCAGACCATC TCACCTGTAC  
 CGAAATAACC TCCCCTACTA GCGAATGAGC AACTTTGGAG CAGAAAGCAG AACTGCATC ATATTTCTCT TACTATGCAA  
 ACTGGTAGCT CAAACCTCAT ATGACCTCAA AAACTATAA TTGCTTCAAC CTAAAAAGC TGATTGTAAA AAAAAAAAAA  
 NGCTGTGGTT GCACACACGT

SEQ ID NO:1165: (Length of Sequence = 330 Nucleotides)

CATTGGTATT TAAAAATGAA TATTAATATA ATGAAATGNN TTTCCTTTT TGTAGGCATA ATAAGCCAAA TACTTTTTTA  
 CCAAAATAA TTTTINAGAGA AAATGATGTA ATGAAAAATT GTACCATGAA TTAGGAGCAT AGTTTTTNC AITTAACGT  
 CACCATTAAT TAAAAGATGA TTGATTATG CTATACCAA TCAGATGAAC TCTGTTCATC ACTTTCTTNC TCTGTCCCA  
 AACAAATTTG TTCAATCAGA CTGAAATGTT TGTGTCTCA ACTTATTAGA ATGGAAGATA ATGCAGATAT TTCTGTGGGA  
 AATAAATAA

SEQ ID NO:1166: (Length of Sequence = 312 Nucleotides)

ATTGGAGATG CCTTTTGCAA ATTTNCCCAT TTTAAATGCG CAGGAAAAAC AATAATATT TTCTGTATGC TGAGGTTTTA  
 TATCTTAGTA GAAGAATTA AACTATGACT TGTATTCAAG TCTAACGCA ATAGAGTAA TGANTGAAAG TAGTCATTGA  
 CCTGGGACAA GATCACTTTG AACATGACAC TATTATACAA AGTGTAATAT TTATTTTTAA ACAACCACTT TTCAAAGCA

GTGTGTCATA CATTCCAAAG AATAAAATGC TAGCTACTAG GTTTTGAGAA GCAGAATAAA ATATGATACT GA

SEQ ID NO:1167: (Length of Sequence = 305 Nucleotides)

AGGAAAAGGA TTGATCACAG GAGAGGTACC AAGGGAGTTC CCAGAATAAT AGAAAAGAGG NTCTCAAGA AGACAGTCAC  
GCAAGAGACC AAGAGAAGAG CTAATCCAAT TGATGCAGGA GGAAGTAGAG CTTGAGAAAG AATGTCTCAA AAAAGAAAAA  
AAAAGAAAGG AGTGGGTAA GTATCTGATG ANTTTNCCTAA ATTGAGAGGA GTTACATAGC TCTATTGAAA ATCTTAGATA  
AANNTGATIG ATAAATACAT AGANCATAAA GCAACACTG AAATAAGGCA ATTATCAACT CCAGG

SEQ ID NO:1168: (Length of Sequence = 342 Nucleotides)

AAGGTTTTAG TGATGATCA GTGAGAAACA TATTTGAAGC AACAAGCACA GTAACTGGAA GCTGTAGGTA CTCAATAAGT  
GTCAGTTCC TTCCTCTCT AAAAGCTGTG CTTTCAAGTC AATTGTATGT CTAGAGTCG ACTGTCTGGT ACAGTGGCCA  
GTACTAGCCA CATATGGCTC TCAAGTACTT TAAAGAGGGC TAGTCTGAAT TGATATGTGT CATACATGTA AAATACTTTA  
AAGAGGGCTC ATCTGAATG ATATATGCCA TGCAATGAAA ATACAAATCA GATTTCTAAA ACTTTGTACC AAAAAATACC  
ATAAAATAAC TTAATAATAA TT

SEQ ID NO:1169: (Length of Sequence = 397 Nucleotides)

GAGACGGAGC TCNTCTGTC GCCAGGCTGG AGTGCAGTGG CACGATCTTG GTTCACTGCA AGCTTCACCT CCCAGGTTCA  
CACCATCTC CTGCTCAGC CTCGAGTA GCTGGGACCA CAGGCGCCA CCACACGCC CAGCTAATTT TTTATATTTT  
TAGTAGAGAC GGGGGTTTCA CGTGTAGC CAGGATGGT TOGATTTCT GACCTGTGA TCCGCCGCTN TTGGTGTCCC  
AAAGTCTGG GATTACAGG GTGAGCACCA ATGCCAGCC TTTGGAGACA CTTTGTATG CCACAATCA GGGTAGGGAG  
GGCTGGGAAA TATTACTGGT GTGTAGTGA TOGAGGCCAG GGATGCTGT AGACATCTG CAATGCACAA GGACAGG

SEQ ID NO:1170: (Length of Sequence = 422 Nucleotides)

GTTTTAAAGC CTCTGGACAG AGCAGTATTT CGTTTAAAC TTTGTTTTT TTAAGCTT ACAGTGTG GCTAATCTC  
CTCCCCTTT TACAAGACG GGGCGGAGG GTGGACACTG GTGGCAGTT AAGGGTACT GTCATTTAA GAAGCCTGCA  
GATTGAAGTG TAAACATGA GAAATTAGG GCTGATTTT TAACTGTGT GAGATATTAA CCAGCGCCC TGTTATAAAA  
TCAGGAATC CAAACAGCA TTTACACGA TTAACCCCC CTTTATATAT TTTTACAAA AATACTGTA GAAAATAATC  
AAAGTTTTT ATCTCTCTG TCTTTTTTG TTTTAAAAA GTGTCAAAG TCTACATNTA AATATAAAN ATTAAAGTT  
AAACTCTAGC CCTTCAGTA GG

SEQ ID NO:1171: (Length of Sequence = 384 Nucleotides)

TCTGAATGGG TTGGTGAAAG GTTACAGGAG CAGACAGCCT CCACACCCAG GCTGCTCTG GCTATACAGG CTACCTCCAT  
CCCTGANIGT TGTAATAGGA AAGTCTAAC ACACAGAAGA GGAGCACAA ACCAATAATT ATCACACATT CAAAATAAAA  
CTAATCCATA AAGAAAAGTA CCAAACTCAA CAAAGACAGC AATGCTGAA AACACTGGG TGTATCAGCA AATAGAACAA  
AGAAAAATAN GCATAATTAA AACAGTAGAA GGTGAAGGAT AATTTTAAA ANTTAGATAT CATATTCTGA TTATTGAAAT  
AAAAAACTTA GTAGAAAAGC TTAAGTGAAG AGGATCAAAC CTGAGGAGGA CCCCAGGAGT TTG

SEQ ID NO:1172: (Length of Sequence = 410 Nucleotides)

GAGAGAAAAA AAAAAATCT TTTAAAGCT GCCATCTGAG GTGATGGCTT CTCTGTACTT ACGCCATACC CCAGANTACA  
ATAAATAAGC AATTAGAAAA CGTCAAGTA TGAAGGATT TCCTCTCCC CGCCAAAAGC ACTGCTCTCT GAAGGAAGCT



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GGTTTCTCTG TAGCTACACC AGCTGTTTCAG AAAGCTCATT GGACCTGGTT TTGAAAATAA AACAAAGTTA AAACCCTGGG  
 AGGAGTTATT GTNCAGTGTG GAGTACTCAG GCTTTCTTAT AAAGAAAAAA AAAGGTTATC TGGTACCAA GTGTGCACCT  
 ACAGACCCTC AGGTACTGCC CTGTGACTTC NCTGTATGAC ATCACAAGGC TGCCAAGTGC TGCTTTNCTA GACTAGGGAG  
 TTGGTGAGGT TTTGCTAG

SEQ ID NO:1173: (Length of Sequence = 274 Nucleotides)

GAGATCTAAA TGAAATTTAT AAGAAAATTG TGGGTTCTGC CCAAGATGAC ATCTAAATTG AAGAAGGTAC ACAGTGAGTT  
 TAAAGGATCA ACGAGAGAAA CTTTTATTAT TCATTTGCAC AAGAAGACAC ATTCAGTATC TGGATTATCC AATATATGGA  
 ATACTTTGAG TTGAAATGAT TAAAGGTAA TCTTTAATCA TTAATTAACA AATCATTAAT TAANCAAAAT AATATTTAGC  
 AAATTAAGCA AGTNCATAAG GCTACATGCA AACT

SEQ ID NO:1174: (Length of Sequence = 326 Nucleotides)

AGAAATTAAA ACACTTTAAT ATAAACATTT CCAGAATATA GACTGACCTT ATATCAGTAC TTTTNGAGAC CGTTTTAAAA  
 CTATATATCA TCTAAGTTA TTATAGACTG TTTTCATTTT CACTTTTCAGA ACTAGAAAAT GCAAAAATAC ACTGCAAATT  
 AGATTTAACA AAGAAAAAAT CAGTTTAAGN TATTTTCATAC ATATTCCTTG GNGAAAGCTG AGACACATAA ACACAGNAAA  
 ACAACAATAA AATACCACCA ACCTAACAC AAAACCAAGG AAAGAACTGN TTTTGTAACG CTGGTAATT CTGTCCTTTA  
 AAATAA

SEQ ID NO:1175: (Length of Sequence = 426 Nucleotides)

GCAATCTCAGGA TGGACACATT AGAAAGAAAC ATTTTAGTTT CAATGTTACC ATAAAACCAG AACGAAAAGC AGCATGCTGT  
 ATTATATTIN NCAATTTAGG TTCCATTTCT AACTCCACCT AAAATGAATA TGAACAACT CATTTTTAAG TGTTTGTGACG  
 TCAATACAA TAATAGTCTA AGTTTATTCA CATATGTACC AACCAAGCC CAATAAGCT AAAAGGAAGC CAAGTGTAAT  
 AAAAAGGCAG CTATAAGGTC TTGTGTTTGA NTTTTTACCC AGCAAGAAAT AAATGATACT TAGTAATCCA TCTTTCCCCC  
 CCCTGCCAT CCCTGCACAC ATCTAAAATA GGCTAACTTC ACCTATTCTA ACTTCTGAAA TGTGTTTGGG ATTCCTGTTT  
 TACTTTCTCA GAGTGGATGG TATAGC

SEQ ID NO:1176: (Length of Sequence = 301 Nucleotides)

CTAATCCTCA ATCCTATCCC TTNCCTCTT AGCCATCCTC TCTAATTINT TTAACCTAAG CCTGTGTGTC CTCAGAAAAT  
 AGGTTATGCT GTTGGTGTGT GTGGTTGGTA ATCTATATAC ATGGNGTTAT GCTATTGATT TGTGTTGGTA ATCTCCCTTT  
 TTAATCAATA CTATATTTAT AAGANCCNIT TAAGTGGTTG TATGCCTCTA CTTTATTGCT TCTGACTGCT GCATGGNATT  
 CCATACTCAT GTCCACCACA CTTACTCATT CTCCTCTTG ATGGACGCTG AAGTTGCTTG G

SEQ ID NO:1177: (Length of Sequence = 331 Nucleotides)

GCAATTCCTCC TGCCTCANCT TCTGAGTAG CTGGGATTAC AGGTGCCTGC ACCACGCCCG CCTAATTTTT GTATTTTTAG  
 TAAAGACAGG GTTTCACCAT GTTGGTCAGG CTGGTCTCGA ACTGCTGACC TCATGATCCG CCCGCCCTCAG CCTCCCAAAG  
 TGTGTTGGATT ACAGGCATGA GCCACCAAGC CCGGCAATC CATGCTTTTA AACATTACTC TGTATGGTGT GATAATGAAC  
 AGTCACGTNT ATCTGACTGT TCATCTGTGT GGTCCATCTG TATTGAATAA AGGAGGAAGG AGTTGAAGAA TAAAGGGGAA  
 AATCTTGACAG A

SEQ ID NO:1178: (Length of Sequence = 325 Nucleotides)

GAAATNTTGT GAGAGAATAG TCATACCTAC TTTAAAAGAG AATAAATTGC CTTTCCTAAA TNCCTCTGCT TCGCTCCTTT  
 CCTGGCGTTG CTCTGGAACC TTGTGAGTTA TATGTATGAT TNCGTACTC TGATATCCAT CAAAGTGCAT AACATAGTAC

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TCATGATGCA GTAAGTACAA ATCTTTTTTG AAAGAGATAT TGCTTGINAA CATTITGGAT TTATAACATT GGCTTATAAT  
ATATACAACA TCTTTATAAA TGCCACCTCA GTTGGGTTTT AAGCCTTACA AGAGTGCTAT GAGTAAATAT CACCCACTTT  
AAAAA

SEQ ID NO:1179: (Length of Sequence = 297 Nucleotides)

CCTTGGGAAT TGTTTCTTGG AAATTAAAGC ATGTGTCTCA CACAAACAGT AGAAGGCATT GAGCAITCAT TAGTCTTTCC  
TCAAGAAGAT ATCAAAATGA GACTAGAAAC TCTCTGGTGA ACACAGAATG CTCTGAGGGG GNCCAAGGTA CATTATGACC  
TTAAACGAA CTCTTCTCC ACTGGCCCTA TTACTCACTG TGGAAAGCAC CATGCCAGGC ACAGCAAGAG ACTTAAGAAC  
ACCTACAAAG GAAGATCTCT NCCATCCACT TGTGTAATTA TCTTTAAAAA GTAATCC

SEQ ID NO:1180: (Length of Sequence = 278 Nucleotides)

GCTGCTGGG ACTTGAAATC TGTGGCCGAA GACNGTCAC TACATAACTT CAAAATAAT CAACCACCTT COCTTCCCA  
ACCACCCAAA TTCCTCATC CAGCGTTTAC TTTTITGAAT CCACTCAGAA CTTTITNCTG CGACCCCCCT COCTAAATGG  
AGTTGGGTGG GGGGGAATG AATACTGAGT TGGCCTTTAT TTTTAAAAG ACTTTTIGAT CCAATGAGGC CCCCTAAATA  
ATTGAGTTTT GGGTCTGGT TGGTTGTTT TATTTTGT

SEQ ID NO:1181: (Length of Sequence = 331 Nucleotides)

AATTGAGTTA CAGGAGAATA CTGTGAACAA TTGTACAGCT AAAAGTAATA ATCTAAATTA AATGTACACA TTCCTAGAAA  
CACACAAATC ACAAANCTG ACTCAAGGAG AAATAGAATA TCTCAACAGA CCTATAACAA CTAAAGATAT GGAATCAGTA  
ACCAAAGCC TTCCAACAAA GAAAAGCCCN GGANTAGATG ATCTTCACTG ATGNTTCTA CCAACATTT AAGAAAGATT  
TAACACTAAT TCTACTCAA CTCTCCACA AAAAATATGA GANGAGTAGA GAAACTTTC TAAATATCT TATGAGGGCA  
GCATTACCGT G

SEQ ID NO:1182: (Length of Sequence = 345 Nucleotides)

GTGTGNTAG AGGGATGGAC AGGATGCTGT TTAITTNCC TTCTTGGAA ATGGACCTTC TGTCCCTTC ATTTGGACAC  
CACAGTGGAA GCTGGTGGCC TGAAGGAAG GATTAGGTCA TGGACATTG AACAGGTGCC TTGGGCATGA TGTATAGATG  
CAGTCATATA TACCTTGCTG GNTGGGGTG CCACCTCCAG TGCNCAGCTC CAGATCCAAG GAGCAGCCCC CTGGGGATGG  
ACCCCATTC TATCATGA CTCCAACAG TTTTINATG TGAAGAAGA AACTTNGCA TTATAGAGAC ATCATCACA  
AACAGTANAA ACAAATCAA CCTG

SEQ ID NO:1183: (Length of Sequence = 272 Nucleotides)

ATGGAAGATT CAGAGATCAA AGGTGAAGTC CTCTATCTCG GCTACTACCA ATCAGCCTTC GACTGGNATG ATGAAACANC  
CAAGGCTCC AAGCAGCATC GTCTTAAAG CTACCACAGC CAGACCTATG GCAATGGGTC CAAGTGGGAC CTTAATGGGA  
GGCCCGGGA GGCGAGGTT CGGTCTCTT GTNACGAGG TGCAGGTATC TGTGGGACT ACATCGATCG CTTGGACGAG  
COCTINTCCT GCTCTATGT GCTGACCATT CG

SEQ ID NO:1184: (Length of Sequence = 335 Nucleotides)

ACATTTTGCA AACTCAGTTG ACTCACCTCA NATTTGCCAT TCCAATTACA GGGCTCGAA AGAGTCAGCA CTCAGCCTTG  
CTCAAGNTC AGATTTAGGG GTTGGCCCC GNCCCGCAA CCTCCACCT ATTGTTTCAA ATGTCTCAA GACAATCACC  
ACTGTATTAA GAGAAAGAGG CATGGGGGCA GAGCAACAAG GAATTAATG AGGCTTGGG ACCTGTCTA GTTGGGTTA  
CTTTGAACCT TAAACCACCC TTGGNCCCA AATCTGCATG AGCAGGGGT GGGCTATCAT GCTACAGANC CCCAAGGAGG  
ACATTTTCC CAACA

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SEQ ID NO:1185: (Length of Sequence = 383 Nucleotides)

GAGAGGTGAG CAGGCGTGCG GGGGGGGGAC TTCTGCAGAG AAAATATTTT TAAAGTCATA AAACCATGAA AATAACAACCT  
 ACTGTACGTT TTATTTTATA GAAATCAAGT AGTATCTAAT AGACAAGGGA AGACATTGAT CCATAAACTT TTTAAAGAAA  
 ATTTGGTAAT CTCTTAAAGT ATTTGTATGG CTTTGAATGG GTGINCTTTT CTAACITTTGT TTTAATTTT ATGATACACT  
 TATAATIGTT TCAAATAGGC ATTTGINCAT TTTAAAACTA CTAGAAGTTA CACTGAAGAA AAGCATTCAA AAGAAGACTT  
 TTGGACAAA AAAATTGTTG AATGAGTGAA ATGCCTGAGG TAGCTCAATT TACCAACAG GAA

SEQ ID NO:1186: (Length of Sequence = 373 Nucleotides)

GGGGCTCAAG GTGTGCATGT NTGAGGGAAG AGAGAGAGAG AGAAGGCCGC CTCANAGGTG ACTTTCAGCC TGCNAGCCTT  
 CTTCCCGGGG CGCCATAAAC GCCCCCAATT TCCAGCTGC TAAAGGAAGA GGAAGGTACC TGTCGTGCA CGCAGACGGG  
 AAGGCTGGG GAAGCGGAG GACTGAGAAA AGCCAGATCT TAGCAAAGCA ATGTCTCAAG ATGGTGCTTC TCAGTTCCAA  
 GAAGTCATTC GGCAAGAGCT AGAATTATCT NTGAAGAAGG AACTAGAAAA AATACTCACC ACAGCATCAT CACATGAATT  
 TTGAGCAGAN CAAAAAGGC CTGGGTGGAT TTCGGAAGCT ATTCATAGA TTT

SEQ ID NO:1187: (Length of Sequence = 365 Nucleotides)

TCCAGCAAT TCTGAATAAA GTTTATTAAA TAATATGTAC AGCAAATGTA GTAATTCAAC ACATCTATTT ATCAAATCAA  
 TCCACTGCAA TGAAGAAAAA TAAATGANCA GAAAAATCTA TGTCGCATA GGNCATGCTC TCAGTGTGTA ATTTAAATGG  
 CAATACITTA AATTAATIGG TTATATATAA TGTCAGTTAT TTTCTTTTCA GAATATAACC TTTTGTAG TAACCTATTC  
 TAGCAATAGG GCTTAATACG NCTGCAGATA AATAGGNTG CAAAAACCA AAACCCAAAA TAATGAAATT NAAAAGGGGA  
 AAAAAACTGT AACTGNGNTC AGAGTTACCT TTCTCCCCC ATAGG

SEQ ID NO:1188: (Length of Sequence = 350 Nucleotides)

ACTATGGCT TACATTTATT TTAAATTTCA CTAAATACAA ATCTTGATTG TCATGCCAGT TTAGATCTT ATTAATTINC  
 AGAATGGATA AATTCAAATA ATCATAAATT ACGTAACTT TTTATTATAC CAAGGTGTTT TAATGCCATC ATATGANGAC  
 AGATGCTTCA AACAACCTGC ATTAAATTAT ATTTNNAATA AAATTAAAT CTATTTTAA CCTATTGTGA GTCACAAACC  
 GAAAACGTTG CGNCTTTACC TTAGAGCTAA AGGCITACTT TATGCATACG GGATATTTAA TAGTCTACAA ATCAAAGGTT  
 TAAACAGNCC CTTAAAAATT CCATATATTC

SEQ ID NO:1189: (Length of Sequence = 393 Nucleotides)

GCAAACTTNC TCACTTCCTC AAAGAAGAGT AGTGCACTAA AAAGAAGGTT GCACCCGGAG AGCATGTAAA GTGTCTCAAG  
 GGGGACATCT GAAGTNCCTC GTTCCAGGG AGCCCACTGG CTCTCACAAG GTAATCTAAT GAAAGCTATG CATCTCTCT  
 GGGCTCCTCA TATGAAAAAN CCCAATGTAT GANGCAAAGC CTAGAAAGGA TTCAATACTG GAGAAATGCA CACAGCTACC  
 GATAAAGACA GCTCAAAAGT CCTAAGGCTG CTGACATGAA CCAGATAATT GGTGGCTACA GTTGTGCTG CTAAGATTG  
 GGTGCATGGG GCTTGCCTT GGTAGCTCC CATGGTCTT TTTTCCAAA AAAAAAAG AAGNCTTCAG GTT

SEQ ID NO:1190: (Length of Sequence = 365 Nucleotides)

AGTGTAACA TCCATATT TAATAGTACC TTTAAATAA GCATTACTAC ATTTAAATG GTTCCAAAT GAATATATA  
 ATGGTAATAT AAATTAAAA ATACGAACCT AAAGTGAATA AATTGTAAC CTAGCTATG GTATAAATA TGTAAATGT  
 ATAGTATACC TGTAGTCAT TAAATGTCT TAAAGATAA CAGCTGTTA CCAGAACATT AGANACCATA GCCATGATTC

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TCAAGCGNTA ACAATCTACA TTGNTATTT NCTTGCCAC TGCATTCTTC AAATGANTAA TAAATTTCCA GAATTC CAT  
TCCCATGGTG TTTTTCCTAA TAGANCTTTT TCACACTCGA TGTTG

SEQ ID NO:1191: (Length of Sequence = 303 Nucleotides)

CCCGGAGAGC TGCCTTCCTC TTCTACCAAG TGAGGACACT GCAGGAAGAC AGCTGTCTAA GAACTAGGAA GTGGGCCCTC  
ACCAGACATT GAATCTGCGC TCCITGAAGT TGGACTTCCC AGCATCCAGA ACTGTGAGAA ATAAATTCAT GTTATTTATA  
AACCAACCTG TCTATGGTAT TTNTGTAGC AGCCTGCAGC TCTCTATCAC TCTTGTTTAT AAGAGGCTGA AGTTTACTTT  
ACCTCAGGCA GAGCTAAGCA AAAAAGATTA CATCCGATT ACAAGATGAA AGTAAACAGA ATT

SEQ ID NO:1192: (Length of Sequence = 315 Nucleotides)

ACTCCAGCCT GGGGAACAAA CAAGCAAGAC TCCATCTCTA AATAAAAAAG AGTGTCCCC TAAGATGCTC TGGGAAATAT  
TGTAGACTGG TGCTCTCTT GGATGATGTT TGCCGTCAGC ATTACCAAA TAAACTTGCT CTCTGGGAAA AAAAAAAAAA  
TAATAAATAA AATAACAGT AAGAACACC CATAANCAA ATTTCTATGC TCTGCAGCC TCTTTTGGC TGAGCAAGTG  
GGACCTTGGT ATACACATCA CCTGINTIN CCCTTTCTT TGAAATGTTG TGTGTCTGT TAAATTGGGA TTGAA

SEQ ID NO:1193: (Length of Sequence = 313 Nucleotides)

CGAATTAGTG AACTGTGCTT CAGGTCAGG AACCTGGTCT TAGCTCCTTG CCTGCTGAGA TTTTGAGTTA CAAGTAGAAT  
TCTCCAAAAG CAAAACAGT AAAAGTCATT TTNCCACTCT TTTGGTCAAG CACATGTAAG CTTTCAGGAC CAGGTGGTAT  
GCGTINTCTG AAAGTGAGAC ACATGCCCCA GGGAAAGGT AATTTTAAAA TTCTTCCCAT AGGTCTCAT CCTGTCTC  
TGCTATGTCC AGCATCCTIN AGTCCAGCT GCAGGCGCTA TATTTAAATA CCTCATGCT TATCGCTTT TGT

SEQ ID NO:1194: (Length of Sequence = 341 Nucleotides)

GATTTAAAG CAAGTATTT TNAAATCCAC GAAAGATGCC TACCTTGGNT CCTNCTCTGG TCCTTATTAG CCACACCTCT  
CTTGACAGGC AGAGGAGTTA GGAGTGAGG GATATTCCCA CCAAGACCTT ACAAATGCA CTCTTAGGCC ATGCCCTGGG  
TACCCAAACT CTAGAATTCC CTCTCAAAG GGACCTAAC CCAACTCAG AGCCTATATA GGCAAITCC TTGGTCCATT  
TTCCAAGGGG TGGNCAAAG ACAACCATTT TNGGAGGGN GANGGGAGTA GGATGAAGCT TTGGNCAGT GGGTCTTGGG  
CAAATCCAC ATATCCCGGA A

SEQ ID NO:1195: (Length of Sequence = 239 Nucleotides)

TTATTGATTC TTTTTTGAAT ATGGAGTCTC GCTCTGNNC CCAGGCTGGA TTGCAATTNC NOGATCTCAA CCCACTGCAA  
CCTCCGCTC CGGGTTGGA GCGATTCTC TGCTCANCC TCCTGAGTAG CTGGGACTAC AGGTGCGGCG CACCATGCCC  
AACTAATTTT GGTATTTTGA GAGACAGGT TTCTCATGT TGGTCAGGCT GTTCTCAGC TCCCAACCTC AGGTGATCA

SEQ ID NO:1196: (Length of Sequence = 291 Nucleotides)

CCATGCTTGG CTCAGGGCCT GGGGCGGGT CCTGGGTAGA GTCCTAGCCC CAGAGCCCCA GCGGCTCATG TCCTGCCGCC  
CCTCACTGAC CAGACGATGA TCGGNAACCT CTTGAGAAAA CATGGCAAAG GATTAGAAAA GGGCAGGGTG AAATTNCCAA  
GCCACTCAGA CGGAACCCAG ATGATCTTCA ATGCAGCCAA GGAGCTGGGT CAGCTGTCCA AACTCAAGT TCACATGGTA  
CGAGAAGAAG CCAAGAGCTT NACCCCAAAG CAGTGGCGG TTGTTTGAGT T

SEQ ID NO:1197: (Length of Sequence = 303 Nucleotides)

CTTCATATTT TTATAGCTGG GGTCAAATA TGCAATTTAA AAATAATAT ATCCATTTC CTATTCTTAC ATTTATGAAT  
ATAAANTAA AATCTAAGAA ACATAATGCT GCCAACTAAT AGTAGTGAG GAAAGGAAGC TGAGAGAAAG ATAAATATAT

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TANTTTAATC ATTACTCAGA AAAGGCAGTA AAAGATACTA TCTATAGCAG GCATCAATAA ATATGANCCA TGAGCCAAAT  
CAGGCTTACC ACCTGATTTT NTAGGATAAA GTTCATIGNA AACACAGTTA CAGTGTCTTT CCA

SEQ ID NO:1198: (Length of Sequence = 318 Nucleotides)

CTCAATTICT TCTCATCTTT TINATGCTAT TATTGTCATA TAAGTTACAT TCCTATACAT TGTGTGTCCA ACACAAATTT  
AAAATTATGC CATTGTCTCT TAAGTCATAG AACAAAAGAG ATACAAACAA AACATACATT TATCCTGTCT TTTATATTTG  
CCTATGCAGT TACCTTTACC AGTGTTCCTT ATTTTCNCAT GTGGATCTGA GTTACTGTCT TTNAACTTCA ATCTAAAGNN  
CTTTCAGTCT GAAAGACTGT AATTNAAIT TCTNGTAGGG GTAGGTTAAC TAATGATTAA TTCTCAGTAT TCTGAGGA

SEQ ID NO:1199: (Length of Sequence = 326 Nucleotides)

TCTAGTTATT CTGAGAACTA CAACCAAGAA AAGAGGGAAG CACCGGGTTG GCCAAGGCCA TCCGGAGACT TGTCTGTCTG  
GGTCATTTAA AAAGCTTTTC TAGGATAACG TTGGCTTTCC AAGTGGTTTT CCAAGCTGAT GTCTTTCCCA CTGAGGAGAA  
GCTGTAGGCC TGTGGACTGC CAGGTAGGAG GAGGTGAGG TTTAGAGGAA AGAGGAGAGC AGGAATGGGT TGTTTNCAGT  
GGGGCTGTTT CCATGGACTC ACCAAGAAGA AATCGAGGTG CTGATGGGGC TGCACAAGTG CTTATCAGAA ACAGCTGTAA  
CAAGTT

SEQ ID NO:1200: (Length of Sequence = 341 Nucleotides)

GGGTGACAGA GTGAGACTCA GTCTCGCTGA AAAAAACAAC AACATTGCTT TACAGTGTGA TTCCAGTTAC AGAGAATATT  
CACATAGGTG CATAAATAAA TGAAAAAATT ATTGGTTAAT GTCTCTGTAT GTTGGGATTC TCAGTGATTT TTTTNTCTA  
CTTTTNAATT TTNATAATTC CTCCAGTGTG TTGGTGTAG CTTTATAGAT TATATCAAGT AACCTTTTGC TGCACCAAAA  
AACCCCCCAA ATCTAGTGGG TTAACAACAA ACCATCTTAC AATTTTNTC AGAAGTGTCT AAGGCTGGAT ATTTTACTGG  
GCTCTCTCTT GAATGTGGGG G

SEQ ID NO:1201: (Length of Sequence = 312 Nucleotides)

GTCTTTNTTA CCCTGCTAGC AATAGCTCTC AGTTTCAGAG GCACAGTCTT TGGAGACCAT TCAGCACTGA GAAAGCAATA  
TTTAGAACCT ATTGCAAAAC TGGGCCTGAG TTAGGCATGG TGATGAATGC ATCAGCAAGG AATAGAAAGT NCTTATCGTG  
AAACCCCTCA ACCTCAACTA TGCCTTCATA GACACACAGC TTATGCACA TGTAGGCACA TGTACCATCT CACATCTTTC  
ACTTTCCCGA GATGCCATAT ACAATTACCT ACATTAATAN CTGTAGCACT ATACCTTTTT GAGCCCGAGA GA

SEQ ID NO:1202: (Length of Sequence = 344 Nucleotides)

GGAAATAGC CAGACTGGGT ATTATGCATG TAACAAATGA GGACATTGTG CATAAGAAAG GAAACATTAG TTTTCTGTCA  
TCCTGGGCCA AGTACCTCAT TACAGTAAAT GTGTGTCTTT GGAACTCTT TGCTGTGNTT GATGGCGGTA AGCATGGGGT  
CCCAGGCAGG TTCAAAGGCT GAACTGTAAG AAATGGGCAA GACAATACAT TTTGTTTTGG AAGGAATTTT TCATGGGATA  
AGTTTCCCAA AGCTTGAATT ACAGGCTATG AAATAAGCA AATAGATGGA GGAGAAAACA AGTATTGTTT TCAAAAAGGT  
ACCAAGTCAA TTCTATTTAA AGGA

SEQ ID NO:1203: (Length of Sequence = 370 Nucleotides)

GTCTTTTATC TTCTCTCTCT TATGTGCACT ATGTAATGTC CTCATCATTT TAAAGTGAG TTGCTATTGG GCGGGCGCGG  
TGGCTCACGC CTGTAATCCC AGAAGTTTGG GAGGCCAAGG TTTGTGCTC ACTTGAGGTC AGGAGTTCAA GACCAGCCTG  
GTCAACATGG TGAAACCCAG TCTCTACAAA AAACACACAC AAAAAATTAG CTAGGCATGG TGGCACACAC CTGTAATCCC  
AGCTACTCGG GAGGCTGAGG CACGAGAATT GCTTGAACCC AGGGAGGCGG AGGGTTNCAG TGAGCCCAAG ATCGTGCCAC  
TGCACTCCAA GCTTTGGGGT GACCAGAANC GAGACTTTCT CAAAACAAAA

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SEQ ID NO:1204: (Length of Sequence = 346 Nucleotides)

CTCTTTAGAA AGCCTGCCTT GGCTGGGCCT GGTGGCTCAC CTCTAATCCC AGCACTTTGG GAGGCCAAGG TGGGAGGATT  
 GCTTGAGCCC AGGAATTINA GACTAGCTGG GGCAGTGTAG TGAGACTTTG TCTCTACCAG AAAAACCGGG CGTGGTGGCG  
 CATGCTGTGA GTCCAGCTA CTGCGGAAGC TGAGGCAGGA GGGTTTGCTT GAGCCCGGA CGTGGAGGTG GCAGTAAGCT  
 GTAATTGTGC CACTGTACTC CAGNCTGGGT GATAGAGTGA GACCCTGTAT CAAAACAAA CAAAAACAA AAACCTGCCT  
 TCINGGGATT GGGCTTCTGG GTTTTT

SEQ ID NO:1205: (Length of Sequence = 292 Nucleotides)

TACAACGAGA CACTTGAGCA CACGGTACA CCCAGACATC TTGGGGCTGC TATTGGATTG ACTTTGAAGG TTCTGTGTGG  
 GTCCCGTGG CTGCATGTTT GANTCAGGTG GAGAAGCACT TCAACGCTGG ACGAAGTAAA GATTATTGTT GTTATTTTTT  
 TTTTCTCTC TCTCTCTC TTAAGAAAGG AAAATATCCC AAGGACTAAT CTGATCGGGT CTTCCITCAT CAGGAACGAA  
 TGCAGGAATT TGGGAAGTGA GCTGTGCAAG TCCTGAAGAA GGAGATTGT TT

SEQ ID NO:1206: (Length of Sequence = 336 Nucleotides)

TTGCCAACAC AGTGTGTCAT GTTTATTGGG CTATTCACAG GTAAGCTTAA AATACAATGA AAAGAAAAGA CCAGACGTCA  
 TCAGGAATGT CGAGAAACAA AATATTAGC ATTTCTTAGT TTCAAATGTT ACCATTTTCAT TGCAGCTGAG GAATATAGGC  
 CATTCGTTGA CATAACTGCA ATGGGTGAGA CTTATTTTGA GCCACAGGAA GCAAATACAT TTAACCAATG ACTTTTAGGA  
 CAGGAAGCAA AAAAGAAAC AATATTTTCA TGTAGCAAGG ACAAGANAAT CATTTATACA AATTAAAGTG GATATTAAAA  
 TACCATTATA AAGAGG

SEQ ID NO:1207: (Length of Sequence = 319 Nucleotides)

TGCTCANCC TCCAGAGTAA CTGGGATTAC AGGCGCCGCG CGCCACGCT GGCTAATTTT TGTATTTTTA GTAGAGATGG  
 GATTTINCCA TGTGGCCAG GCTGGTCTCC AACTCTTGAT CTCAGGTGAT CCACCTGCCA CAGCTCCCA AAGTGCTGGG  
 ATTACAGGCA TGAGCCACTG CGCTGCTC CATTTCTTT TTATAATCA TCCTGAACCT CCGTTAAGGT AGAGAAGCTG  
 TTTGATGTC CCAGCCCTG GGAGGCTGAA AGGTAACTIN ACCAGCTCCA TGCTGAGTT TAGCACCTGC TGTGCCAGG

SEQ ID NO:1208: (Length of Sequence = 357 Nucleotides)

GAGATGTTA AAAATGAAGT GGAAGTTTT TGTTTTGTG TGTTTTTC AGAAAAAGA TTTTAAATGG CTTGAATGTA  
 CTGCCATAGT TGCGTCAGAT TGTCAGAAAA TTATGTTGTA CATCTGAGAG AGAAAAGAG AGCCTTTTGA GGAGCTGGC  
 TAAATTAAT TTTTGTAG TCTCTTAAT CTTGGCTTG AATGATCAT TGACTTTCT TGCCAAGATA GGGTTAGCAT  
 TGTTTTGTG TTTTAAAGC AGGCCAAGG ATTGCCAGG GGGGAGACAA CCTGAGCAAC TGAAGGAAGG AATTCTAGA  
 AATGTGTTT ACCAGTTGTT TTAGTCTGAA TGTGATT

SEQ ID NO:1209: (Length of Sequence = 362 Nucleotides)

CCCATCTGCT CCACCAAAG AAATCAGACA AAGTAAATTT TATTGAGACA GACAGAAATG CACCTACTCA GGACTACAGT  
 TAAGCATTGA CTATTAACCA AAGAGTTGTG TTCACATCC AGATAAGTCT ACGTGGAAAA GCATTAGAA TTTACTAGGT  
 TTTTNCIACA TCACTATTTT ATCTACAATA GGGACAACAA ACTGACACTC AGGATTTGAT GGGCTCTCAT TACAATGCTA  
 TACATTTAAC AGGNCAAAC ATCAGTGACT TTGAGGAAAA AGTTATAAAA NGACCAAAC CACCCACTGT AGGATGGGCT  
 CTGGATGTT ACTGTACAGC GTGGGTCAAG GTAAACAAGA GG

SEQ ID NO:1210: (Length of Sequence = 349 Nucleotides)

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GAGAAGATAG TAGAGAAAGT CAGCGTTACA CAAAGGAGAA CCAGGAGAGC TGCTCTTTTT GCGCAGCTA CCACTTCCCC  
TACTCCCA GACTACAAGAG GTGTAGGAA GAGTGTAGAG CCACCTAAGC GTAAGAAGCG GGCCACAAAG GAGCCCAAAG  
CACCAGTCCA GAAAGCTAAG TGTAAGAGA AAGAGACTCT GACCTGTGAG AAGTGCCCA GGGTATTTAA CACTCGCTGG  
TACCTGGAGA AGCACATGAA CGTTACTCAT AGGCGCATGC AGATTGTGA TAAATGTGGC AAGAAGTTTT TCCTGGGAAG  
TGAGCTGTCC CTTACCAGC AACAGACT

SEQ ID NO:1211: (Length of Sequence = 344 Nucleotides)

TTTTTTTTT TTTTTCAGG GAAGAGCTTT ATTGCTTCCA TGGGGGTGGC CTGGGACGGC TGCCACAGCT TGGGTAAGCT  
CCTTGGGCCT CANTTCCCTT TGGTCCAGGC TAAAGGCAGA ACCCAACCAC CTGGCAGTNT TGTGTCTGAA ACCTAGAACA  
TGTTGCAAGT TGGTGAGTCC GGGCCTGCGG TAGTCCTATG GNTCAGCTGC AGCTGTGGAG GGGAGCTCTT CCCAGCAGGC  
GGANTGGGCG TCACCTCTCT GAGCTTTAAA GTTCTTTCTG CTATAGCCCT GGGCGGTCT TGTGTGCTCC GAAGGAATGG  
GCTCCAGGGT TTCCCATGG GACA

SEQ ID NO:1212: (Length of Sequence = 364 Nucleotides)

AAAGAAAACC TGGTATTTTC ACCATCCTCT CTGAAAATAA ATACTTTGAC TTGCACTGAT TACTACTTCA TCAGCATTCA  
ACTCCGCTCC GTGGCACTCT GTGTGAATAA TTTTAAAGGC AGATTAAAGCA TTCTAAAAAT AAATTCTATT GGTAAATTAG  
GATATCAGAT GCTTCCATTA TAAAGCCTA TCCTATCTCT TACTCTCAGC TGGCAGTCAT ATCCAGATCT CAAGCTACTC  
TGGCTCTTAT TGAACAAGAA CCTATTCCAG GNGTGAGGT TTTGAAGAGG GGATCTCTCA TGGTTAACTA GAGNCAGGAA  
GAGGCAGAA TGCCACATA CTCTNCAGG AGTTAAATAA CAAT

SEQ ID NO:1213: (Length of Sequence = 302 Nucleotides)

CTAATTTTGT TATTTTTAGT AGAGACGGAG TTCTACCATG TTGGCCAGGC TAGTTTCAAA CTCTGACCT CGGATGATCC  
ACCCGCTCG GCCTCCCAA GTGTGGGAT TATAGCATG AGCCACTGTG CCCGGTACT TTTTCTTTT TTAAACACT  
GAAATGCTG TATCTACCAC ATTAACATTT TATTTAAAAA AATTGTGTA ATAGCATATG TATGTAAATT TAATATTAAT  
ATACCTCTTT TTTGTCTT CTTAGGTGG TTGGAGCCTA GGGATACTTA CTACTGATT TT

SEQ ID NO:1214: (Length of Sequence = 317 Nucleotides)

CTAATTTTNC AGACAGGTTT ACATGTAAAA GGCTAGGTAT TTAGCCACCT CAGCAITGAT TAGTTTTGGA TGCTAAGCT  
CTGTACACA TGGCTTCCA TGGCTTCACT CTACAAAACA TATTINCAAC GTGAAGGNTA CATCTACAAG AAATCTACAT  
TTCAAGGGTT TTACAAATCA ATCTGTATC TTCCCTGTA ATTGACTCTC ACAGACCCG TCCCTGTGIN ATINCCTTTG  
CCCAGCTTAA CGGTCCAAAG TCTACTTAAA TGCAGCTCAA AAATGTAAAG ATTGGGCAAC AGATTTACAG TTCTGT

SEQ ID NO:1215: (Length of Sequence = 276 Nucleotides)

ATAAGGIATT AAACAACIAT TCTGTACTT GANTTAAAA AAAATCAAGC TGGGTGCAAT TGCTCATGGC TGTAATCCCA  
ACACTTTGCT AGGGTTAAGT GAGAGGTTCA GCCCAGAAGT TCAGTACCAG CCTGGGCAAT ATAGTGAGAC CCTTCTCTA  
CAAAAAAAT GAAGAAATTA GCTGGGTATG GTTGCATGTN CTGTGNNCC AGCTCCTCGG GAGGCTGAGG CTGGAGGNTC  
ACTTGGGCCC AGAAGGTCAA GGCTACAGTG AACCTT

SEQ ID NO:1216: (Length of Sequence = 354 Nucleotides)

GCATAGGCAG CCCCTGCTCT TGCAATTACC TCCACGTGA ACTAGCTGCT CAGTCATTGC TCTGGAATAT GCAGTTGTGA  
TCTAGAAATT AAAGATGGGA TTAGGTAACC AGTGAGGTCC CTCTACTGC CAGTGTATGA CTCTCTCTT TGTAATGTC  
ATAGTAGGG TTCTGTACAC AGGACATTTT CTTCAITGTA GTTCTCAGA TGCAITGAGC TCTCTGAAT GACTTAGCGG

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GGAAGCTCAG TTGCAGCTGA CGTATTAAAG GGTCTCTCC CATTGTGCTG TGCCCGCTCG TTAGCGTAGG ATTCTGCCC  
CACGGCCCTT CCTGTTTCT AAGGGCTGG CTTT

SEQ ID NO:1217: (Length of Sequence = 272 Nucleotides)

CTTCCCAGCT TTGCTTGTT GTAAACAGCT GGCAGTGGT ACATCTATAT TTGTTAAGAG GCAGAGCACT GTATTTTGIG  
TAAGATAAGG TGCTAGTCTT GGCCAGGCTG CCAAGCTGGG GCTNITTAAA ATAAAAGTTT TAAAGAAAAA TTATAGCATA  
ATAAATTACA CAATTTTATT GGAAACTGA AGGTGTTCAA CCAATGCTAG TTTTAAATA TATTTAGAAA TACTATTCA  
GGAAATTTA ACTACACTCA TTAGTCTTAT GG

SEQ ID NO:1218: (Length of Sequence = 281 Nucleotides)

GTGCCCAGG CTGCAGTGCA CTGTGCAAA CGGGCTCAC TGCGCCCCA ATCTCCCACT CTTAAGCAAT CCTCCACCT  
CAGCTCCTG AATAGCTGGG ATTACAGGTG TGCACTGCCA CACCAGCTA ATNCTTTAA TTTGTTTTAT TTTTAGTAGA  
GATGGAGTTT CGCTATGTTG TAAAGGCTGG TCTGGAATG CTGGCTCAA GCGATCTCC CGCCTGGCC TCTCAAAGT  
CTGGGGTTAC AGACGTGAGC CACCATGCTT GGGCTGCTC A

SEQ ID NO:1219: (Length of Sequence = 231 Nucleotides)

GTCCTCTCTC CCTCCITCCC TTATATGGCA CTGCCCAGAA CCAGGCAGCC AGCAGGGGAT GGGATCAGGA TGCAGTTGTC  
ATGGAAACGG TTGGGGATCC ACAGGAACGA CATTATACA GGGACATTIN TGAAAGCAAA GCAAGAATGA NTGCTTTCCC  
GATCTCAGAC TGGCTGGATT CAGATCATG TTTTGGCTGG TTCTCATTTT AAGGGGTAAG CAGTTTGCTA T

SEQ ID NO:1220: (Length of Sequence = 409 Nucleotides)

AGTCACTCAG AAACCTACTT TGCTTACAGC CTCATTATG TTTTGTAT TTGTTAAGAT ATTCCGTGTG ATGACATATT  
TTGCCTTAAA TTINCTAATT TTCCTGGCCA TTGCTTTCCT GTGATTGAA AATGTTACGG TAAGTGCTTA GTTTGGAAAC  
TATACTGTCA ACATATATTG CATTACTTCA GCAGAGCTGT AGTCCATAA CATAATAAAA TGATGCTTTT TTTAATAAGA  
AGATCATACA CATTTCATTA TGCCCTAAAA GATGAACATT CAAAGTTCAC TTTTCTCTG TTTTGATATG ACGGATATAT  
ATCAGTAAAA TAAAAATGC TGCAGNACCA ATATGCACTA ACTCAAACAT GCTGTGGATT TGTAGGGGCA CTGAGGTAGC  
AATGTCAAG

SEQ ID NO:1221: (Length of Sequence = 396 Nucleotides)

ATCTGAGATA CTTGTCTCTC ATGAATAAAT TAGTTAGTAG AATCTAATTT CTAGATCCTT CATAATGGTA ATTGAGGGTA  
AAAAATAATA ATGTAGTAGT CAATTTTAGC CCTTTAAACC TATGGGGAAC TGTATGAATA ACTGTTTGAA ACTGCAGGGT  
AATCCTGTCA CACTTGCAA CACATAGAAG CAACAAGACT ATTTCTCTC ACACTTTTAA TTAATAAGT GCCTGAGTAG  
ACTTCCAGG TAAGGTTGAG AAATTNCTT TCTAATTTCC CTGTTTTAAT GACCACTACT TTTAAAGCTA TGCTGGGAAT  
TCACTTTCAC ATATATCTAA CTTACAGGAA ATTTTGAAG AGCCTAAATG TCTATGGGTA GATTCAATGT TTCCTT

SEQ ID NO:1222: (Length of Sequence = 350 Nucleotides)

GTATTINTT CTGGTACTC TTCAATGGCT GCTAGAGAAC TTTACTAAAT TATAGTCCAG TAGCTGGACA GAGCTGCATG  
TGTATTGCTT AAGTCCACT GTGCTGCTGG TCAAGATTAT TTGCGAGT TTGGTGGTGT TGAAGAGGAA TACTGTTGTG  
AAGGCTGAGT CAACTGCATG ACAATNCTA TGGCTCACTG GCTGATGAGT TGTGGCATGA CTGAAAGCT CTGCTGTAT  
TCCAGATGA CAAGTCACAC CTGAACAGCT GGATACTACT CGCATCCAAT TTGCTTCAA GTTAACATAT TTNCAGAAAA  
TATTTGGATT TGGAGTACAT ACAAATATTT



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SEQ ID NO:1223: (Length of Sequence = 370 Nucleotides)

ATAAGCATAT GANTTTATCT ATAGGCCAAG TTAATGACAT AACTACAAAG AAATGACTTG TTTCACATGT TTTAAACCAG  
 TGTTTGGCT ATACTAACTT AGTGAGACAT ATTCTAAAGA AAAATAGAGA CGCAAAGAAG ATCTTACACT TTAATAGTCA  
 ATTTGTAGT TGTAATATTA CTATCGATCA TTTTGTAAGT CTCCTATATA GGGTGTAGGA TGGTGGAAAT AAGTAATTTT  
 NTTAATGTTG TTAGGAACCA AGGCTATCAG TGTAAATGA AGGAGTTACA AGCATAAGAT TGANAGACGG TAAGTAAAAA  
 GCTCATTAGT ATAGTTCCAA GTTTAACTTG TCAGGGATGA GCTCATGATT

SEQ ID NO:1224: (Length of Sequence = 188 Nucleotides)

ACATGACCNA GGCCTGACCA AATCAGACTA AATCCTANTA CCTATACCAG AGTTATTGAG AAAGATAAGN TTTGGCCTGC  
 NGGCCTTTGA CAGTGAAAGG NINTAGGCTT TGGAGCTCCT CAGGGCCACT GCTTCAGGGA ACCTTGCTGA CAGTGAAGCC  
 AACACAGATG AAAGCAAGGC CAAACATT

SEQ ID NO:1225: (Length of Sequence = 353 Nucleotides)

CCCCAGCCAA GGGAGGCAGT NAGTINAGTGT GGTACCCAGC GTGGGAAACC GTGCTTTTIN CCATGGNACT NTGCAACCCA  
 CGGATTAGAA GATCCCACTC AGGAACCCAC GNCCTGGNA CCTAGAATGC CAACCCAGA GCTGCACAGA TTCTAAACAA  
 CCTCTCANCT GGAATCTGCC TAAACCTGCA GAGCTCCTGC GGGGAGGGGT GACCAGTGCC ACANCTGCTG CTGCCTGCTG  
 CCTAAGCCAT TTAA

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CAAAAAGTTA GAAAAACATG TAAACGTAAG TNATGAGGTA TTTCATAGAT ACAGTGCCCA TACAAATNCT CTTTCCACA  
 ATTTTCAACT GCCAGATCTC TTGCTTTAGT CTTTTTNCCT TATATTTGGA GAAACAGAAG AGTTTGACAT AAAAGTCCCT  
 TTGAGGATGT GAGGGTGTGA GTAGTTTACA GCAGGGTCAG AAAATGAAAG TAATAAAGCA ATATTTACAT GTTTTTGTAT  
 AAGACCAAAA ATATTTCTCT AAAAAGTTGT TAAAAGTTTT TTAGTCTAT AAACACTCAC TTTTATAGGG CACATGATTG  
 TCTGTGTGAC TTCTCTTCC AGAGGAGGAC TTT

SEQ ID NO:1227: (Length of Sequence = 352 Nucleotides)

GGCATCTGTT TTTTGTGTTG TTTTGAGATA GAGTCTCACT CTGTGCCAG GCTGGAGTGC AGTGGCGTGA TCTCGGCTCA  
 CTGCAATCTT TGCCTCCGG GTTCAAGCGA TTCTCTGCC TCAGCCTCCC AAGTAGCTGG GAGGTGTGCA CGCCACCACA  
 CCCCCTAAT TTTNGTATTT TTGTAGAGA TGGGGTTTCA CCATATTGGC AAGGATGGTC TCAATTTCTT GCGCTTGTGA  
 ATCCGCCCCC CTCAGCTCC CCAAGTGCTG GGATTCCAGG CGTGACCAG GCGCCCGGCC GGNATCTGTA GATTTTAAAA  
 GGCCCCAGTG GTTCTNATGC ACACCCCCAG AG

SEQ ID NO:1228: (Length of Sequence = 387 Nucleotides)

AGTTTTCCAA GATTGAGTGA CACTATTGTA ATGAGAATCT TCACTGGAGC ATCAGAAGAA CTGATTTCAA GCCAGTTTGT  
 TTGGTCAGCA CGGTCAAAC TTCAGAAGAA TCTGTGTCTC TGAGGCTTTC CAAAGCTTTG TTCCCCAGGG CAGTAACAGC  
 TTCCAGTGT GGCAGAGTCT TTAGTATTAT CACCAGGGCA GCTGCACTGT GGCCTGTAGC CATCTTTCTC TTTTAGTACG  
 ATCCCACTG TCAGACTTCT TGAATTGCA CTTCAAATTA GAGCCACAAT CAAATTATCA GTCACGNTGT TTATTTTGTG  
 CACCAGAGAA AGGACAGAGT CTGTTTCAGC AGAGTTTGA GCCAGGTAAT GATCTCTCTT CAGCAGG

SEQ ID NO:1229: (Length of Sequence = 366 Nucleotides)

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CTGATAAGGA GGTAATTTCA TAGGAGCTGC TAAGATGGGC ATGAGGNTCA AACTGCAAAG CACCAACCAC CCCACCAACC  
 TGCTGAAGGA ACTCAACAAG TGCCGGCTCT CAGAGACCAT GTGCGACGTC ACCATTGTGG TGGGGAGCCG CTCCTTCCCG  
 GCCCACAAGG CTGTGCTGGC CTGTGCAGCT GGCTACTTCC AGAACCTCTT CCTGAATACT GGGCTTGATG CTGCCAGGAC  
 CTATGTGGTG GACTTCATCA CCCCTGCCAA CTTTINAGAAG GTTCTGAGCT TTGTCTACAC TTCAGAACTC TTCACAGACC  
 TGATCAATGT TGGGGTCATC TACGAGGTAG CTGAGCGTCT GGGTAT

SEQ ID NO:1230: (Length of Sequence = 343 Nucleotides)

AGTGGAGAGA AGCCCTATGA ATGTTTTGAG TGTGGGAAAT CGTTTTGCTG GAGCACAAAC CTCATTGAC ATGCCATTAT  
 CCACACTGGA GAGAAGCCCT ATAAATGTAG TGAATGTGGA AAGGCCCTCA GTCCCTCACT CAGCATCAAA  
 GGATGCATAC TGGGAAAAAT CCCATCAGTG TAACAGATGT GGAAGACCT TTTACAAGTG GACAAACCTC AGTTACCCCTT  
 CGAGAACTTN TTTTAGGGAA GGACTTTTTG AATGTAACCA CTGAGGCATA TATTTTCCA GAGNAACAT CTCTCTGCG  
 ATCTGATCAA CCATACCAA GAG

SEQ ID NO:1231: (Length of Sequence = 406 Nucleotides)

CTCTCGCCGG GCAGCTTGA GAAGGCGCAA TACTCTCCAG CTCACCGTT ACTTCAGCAT GGCTGGGGAG GCCTTGGAAA  
 ACTTATAATC ATGGTGAAG AGGAAGCAA CATGTCTTC TTCACATGAC GGCAGGAAG AGAAGTGCTG AGCAAAGGGA  
 GGAAAGCCCC TTATAAAACC ATTAGATCTT GTGAGAACTC ACTATCATGA GAACAGCATG AAGGTAACCG CCCCATGATT  
 AANTTACCTC CCATGGGCTC CCTCCGCAA GACGTGGAGA TTATGGAAAC TACAACCTCA GATGAGATT NGGTGGGGAC  
 ATAGGCAAC CATATCAATG TACATGTGTC TTTATGGTAG AATGATTAT ATTACTTTAG GTATATAGCC AGTATTGGGA  
 ATTGCT

SEQ ID NO:1232: (Length of Sequence = 380 Nucleotides)

AGACCATCAA AGGCCAGAG GAGAGACTCT TGGGACAAAT AAATATTTAA AAGCAGTGC CTATGAGAAA ATGAAAAAG  
 CCACAAGCAA AGTAAGATC CATGTCCAA AAAGGCTGA GAAATCTTA AACCTTCTCC TCAGATTGAT CCCAAAGCTT  
 AGAACGAATA CCAAGATAAT AGCAAAAATC CTCCCTGGAA AAGAGTCAGT CTGCAAAAAC CGGAAAAGGA GGTGTGTTTT  
 TCCACAATGC CTAATTTCTA ACAACAACAA CAAAACTCA GAAAACATGG CCCAATAAGT GGAAGAAAAT AAAGTGACGG  
 AAACCTTCCC CGGAGGAAC ATAAGCTTCA GGCAACTAG ACAGATTTTA GACTGTCTAA

SEQ ID NO:1233: (Length of Sequence = 357 Nucleotides)

TTCAAAGTTT ATCACAACCA CCACCATCAA GACAGCAAAC CAAAGGGGCA TGGTAAAAGA AAGTCCAGT GACTCTGGAT  
 TTGGTTCTAA TTTAATGCA ACTTCTGAT TGAGTGCAGG GTCAGCACTA CTTGGAAGTG GCTTTGGCGT TTCANCGGTG  
 GGTAAATGAG ACATTGCCAA ATTTATATTC TGTAATTTN CGTTGGGTGA GGGGAGCATT ACATCATTAT ATAATGGTAC  
 TTCTCAAGT TGCTGGTCAT CAGTTTCTGT GTGTTGCTG CCAAATCTA AAGATATGAT TGTNTCTCCA GGGCTGGGG  
 CCAGCAAAGT TAAAGCATCA GGTTCCTTCT TAAGTTT

SEQ ID NO:1234: (Length of Sequence = 313 Nucleotides)

CCAAGAAATC TTAATNCTT TATGTGTTGA CTTTGTGACT CAACAATTTT TTTAAACTT TTTGTTTTT NCTGAAACGT  
 TCTGTGTTT ATGAGCCTTT TGTTTGTGTC TOGTTAAATG CACTCGACCC AAAATTGGTT TGGCATATCG AAAAGGAGAC  
 CAAGGAGGGA GGGGCTGGGG CGTGGGAGGT GGGGAGGAG; CCCGAATGGA CAGAAAGTTG AGGATAAGAG AAGAGGAACA  
 TAGAGACAGC CAGAAAGACA TGGGGAAGA GTGTTGAGA CTAGCAAAG; GGAAGGCAAG CCAAGGCCAA AAG

SEQ ID NO:1235: (Length of Sequence = 386 Nucleotides)

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CTCTCTCAGC ACAGCCTGGG GAGGGGGTCA TTGTNCTCCT CGTCCATCAG GGATCTCAGA GGCTCAGAGA CTGCAAGCTG  
 CTGCCCCAAG TCACACAGCT AGTGAAGACC AGAGCAGTTT CATCTGGTGTG TGA CTCTAAG CTCAGTGCTC TCTCCACTAC  
 CCCACACCAG CCTTGGTGCC ACCAAAAGTG CTCGCCAAAA GGAAGGAGAA TGGCAGCCTC CACATCTGGG GTTCAAGTGA  
 TTATCCTGCC TCAGCCTCCA AGTAGCTGGG ATTGCAGGTG TGCACCACCA TGCCTGGGTA ATTTTGTAT TTTTAGTAGA  
 CACGGTTTCA CCATGTTGGC CAGGCTGGTC TGGAACTTCT GAGTGTAAT GATCTGCCCA CCTTGT

SEQ ID NO:1236: (Length of Sequence = 401 Nucleotides)

AGGATGTACT TCTAGTAATG TCACTGAAAG CAGATATCAA AATTCATTAC CAGGAGTACT TTGCTGTTGA ATGGTTCTCTG  
 TGCCATACAG AGATAAGATG GAGTCTTTGG AAAGTTGTTT CTTTGCCACT TCTTCTGATT TTTAGTTTGT CTCAGTGAAT  
 AAATCTAGAT CCCAGATGT TACTGTAGAC AGGGTTGCAG CTGCTGGTGC AGAGGGTGTG CCCTGAGACA AACACCAAAA  
 TAAGCTATCA AATCTGTCAT AGTAAAGCGC ANTTAATCCA TTAATTAAAA TCCAAATAAA GTTATAAAAT TAGATAGGAA  
 TCAACAATT GTAGAAGGTA AAATGGTGCC ATTCAGAGG ATCACTTACA AGCCAGCCC ATATAAAACC ATCTACAATC  
 A

SEQ ID NO:1237: (Length of Sequence = 372 Nucleotides)

TTAACTCTTT CTNCTCTCA GTCGATTAT AGAGTTGGAG CAAATGTCAT GATGANTTTT NAGGCCTAGG CCTGGNCTCT  
 TGAGGTGTGT GTGTGTGTGT GTGTGTGTGT GTGTGTGTGT TTCTTTCTCC ATAATAGTCC CAACCCATAA CAGGGGTATG  
 GCACAGTACT TCTTATGAAC AAAAGTGCTA TTGGTCTACA AGGGGACTTG AGCCTGCACT AATGTATTTT GATTAGGATT  
 TTTGTGCTGT CTGTATGATG TTTAACCACA CTGTCAATTA CAGACTTCCT TTAAGGAATT TCCAGGAAAC CCCCTTACCA  
 TAAGAGTTTA AATTAATAGT TTNCTAGTTT AATGACAGCA GTTGGTAAAG GA

SEQ ID NO:1238: (Length of Sequence = 304 Nucleotides)

GGACAAAATT CCAATTATTG TAAATGTAAA AGAAAAGACA ACAAAAATAA GCTAGAAAGA TGAAAGCTAA AAATCTTATT  
 TGAAGTATGT AAGATGATGA CAGATATTAA ACAGTAATTA GTCATGAAAC AATCATTTAA ATGCTTTTNC CAGGGGAAT  
 GCAGAAGTTG AGACCCCTAA AGAGCATGCA AGCTAGTAGG GAGGCTGCGA CTCATACCTT TGAATCTTTC TGTTCTGCAA  
 ATTCTCAACT CTTACCAATT TAACTCTGCA GTACTGCTAT GGAAATTACA TAAGAGTAAA TTGG

SEQ ID NO:1239: (Length of Sequence = 389 Nucleotides)

TGTTATAACT GGCACTTTAA TTTGTTTTTG GAACTAGAAT TTAGGGGCAG TTGGATGAAA TTGCAAATTT AGAAGGGGAA  
 TAAGAATTTT CTAGTGCTAT ATAAAGAAAT GATGATGGAG ACAAAGCCT TGCTTTCTCTC TTTTITAGAAAT TTATTTCGA  
 TTTTINAGCAT ACTGTGGGGC TTTTAGAGCT AATATGATCT AAATNCAGAA AATTTAATTT TCATAGTAGG CCAGGTGTGA  
 ATTACTTATG TTTGCTATAG AATGCTTATT TAGACTAACA ATAAATTTAC TTTGCTTTCT AAGGCCAGTC AGCGAATGTG  
 GGGATGAGGC AGGATGTTTT AAATGAGCCA GAGATGATCC NCAAGGGGAA CAGTCGACAC AGAGGTCTT

SEQ ID NO:1240: (Length of Sequence = 365 Nucleotides)

CTCCAGCCTG GCGACAGAG CAAGACTCCG TCTCAAAAAA AAAAGCCTTC CTTGCCAGGT GAAAGCAAGA GTGGTATGGA  
 ACATTTATTT AAACATAAGA AGCAGAAGGT TCCTCTCTTT GCAAGTATGT TTTCTCTAAA TGTAGCATTT CCACTGGAGG  
 AGGTGTCTG GGTGGATGTT TAATATGTGA GGATTGTNCA GCGAGGCAGA TAACCAAGGC TCTGCATATA CAGATACCCA  
 CAGCCCAGGA ATCTTGAGAA CTGAATGGCC CATAACAACC TCTGGCACTA TCGGAGCTGC AGGGAGGCTT GGCTGGGGCT  
 ACTCCAGTCT CAGGCCCTG TTTTITAGCGG GAAGTCACAA GGAGG

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SEQ ID NO:1241: (Length of Sequence = 350 Nucleotides)

GGGGAGGCGG TAGGGTCTGC NCTGTCTGTN AGGGGCTTGT GGCTTGGCGG GTGGGCTTTG CATGGTCTCG CCTCTTGAGT  
CCAGCCCCGT CCTGATGGGG CAGACTTCTG TNCGTNCTGC TTCTGGGGTG ATGTCAATAC TGAATGAGAG GGCAAGAGAA  
GGGGAAGGGG AACCGCCCAT ATGTNCTTCA CGTCTGCAA GGGGCTGTN TGGTCCCAT GAAATGGTCA GCAGAGACTT  
TGGGATGGGT ATGACTCGTG GGTACAGGG TTGACTAGAC AGAATCTAAA GAAGGTGGGT GCTTAGCTNG GAAGTCTTCA  
GTAGGAACGG ATCACTGTGA AGCTCTAGGG

SEQ ID NO:1242: (Length of Sequence = 392 Nucleotides)

CTCTTACGAG TGAGGTAAAG TATGAACAG ATATTTAAAA GCTATAAGCT TTTAAACAGA ATAGGCATAT TGCTGATACC  
AGTATTTGAC AACCGCCTTG TTTTTCAGA TAAGAAACT GAAGCACAGA GACCATAAGG CATCAGCCTA TGGTCATTCA  
CTTCGTGGTA GTACAGTGGG AGGTACACC AAGGCCCTCT GGCTACTGAT AATCTCTGTA CTAGGCTGCT TTTAGTAAA  
CTCTTGAATG AATGAAAGAA AGAACACATA CTGTTGACTT TTGAACCTGA ATCTAAACAA AACCTATGTT GAACCTTAAG  
TCTGTAATCT AAGAACTATC AACTTAAAC TTGTTACAAA AGGNGGTGAT GAGCACAACC ACTTTCCTTT GG

SEQ ID NO:1243: (Length of Sequence = 377 Nucleotides)

GTGGGCGAGG CGTGAGGTAG GGGTGGGGTG GGGATGACAG TCAACACAGC TTGGACCAGA AGCCCATGGC GCCTGGNTCC  
CTGGAAGAGG ACAGGGCACA GACGGATGCC GCCTTTNITG CTGGGACACT CCTGCCACCA TCCACAGCTC CCCGTCCT  
CCACGTCTT GTACTTGGTG AACAGGTGT AAAGAACCCT CAGGGTGGAT TTNAGGTCCA AGTTAACCAC GTCTTCAGGA  
CGAGCCTTGG GTTNTNINAG GCCTCCGTCC AGCATCAGCT CAAAGGCGAA GGACACATTN TGGACCTTCT GATCGAAGCT  
TTCGGGAGTC AGGTAGAAGT GGTGGAGAGG AACAAAGTAG TCTTCAGAA GGCCCAT

SEQ ID NO:1244: (Length of Sequence = 312 Nucleotides)

ATTTTNCAT CAATGTCAT CAAGGATATT GGTCTAAAAT NCTCTTTTTC AGTTGGGTCT CTGCCAGGCT TTGGTATCAG  
GATGATGCTG GCCTCATAAA ATGAGTTAGG GAGGATCCCT TCTTTNCTA TTGATTGAA TAGTTTCAGA AGGAATGGTA  
CCAGCTCCTC CTGTACCTC TGGTAGAATT CGGCTGTGAA TCCATCTGGT CCTGGACTTT TTTTCTGTG GTAAGCTATT  
GATTATIGCC TCAATTTCAG AGCCTGTTGT AGGTCTATTC AGAGATTCAA CTTCTTCTG TTTTAGTCTT GG

SEQ ID NO:1245: (Length of Sequence = 320 Nucleotides)

GGAGATCGTG CACATCCAGG CCGGCCAGTG CCGCAACCAG ATCGGGGCCA AGTTCTGGGA AGTCATCAGT GATGAGCATG  
GCATCGACCC CAGCGGCAAC TACGTGGGGG ACTCGGACTT GCAGCTGGAG CGGATCAGG TCTACTACAA CGAGGCCTCT  
TCTCACAAGT ACGTGCCCTG AGCCATTCTG GTGGACCTGG AACC CGGAAC CATGGACAGT GTCCGCTCAG GGGCCTTTGG  
ACATCTCTTC AGGCCTGACA ATTTCATCTT TGGTCAGAGT NGGGCGGCA ACAACTGGGC CAAGGGTCAC TACACGGAGG

SEQ ID NO:1246: (Length of Sequence = 275 Nucleotides)

TTTTTTTTT TTTTTTTTT ATCTGACAGC AATAGATTTA TTAAGTATCC CCGAAATAT AAACACAAAC CAGTAAAAA  
CAAAACCGTA AAACGTCAGG CCTGGAGCTG CAATAAGACA GAGACAGGAG CAGCTCACAC GTGGCCTAGG TGGGGAGGAC  
GAGGCCATAA ATACTGCAGG AGGGCGGCAA GGGAGCCCTA GGGCGAGGGG AAAGCAGGGT NTCGGCAGCG AGATGGCTCC  
GGGGGTTAG ACACCTCTGG CTGCGCCCC GGGCG

SEQ ID NO:1247: (Length of Sequence = 384 Nucleotides)

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GGTCTTGCCG GAGAAGTACC CCCCTCCAAC CGAACTTTTG GACCTGCAGC CCTTGCCCGT NTCTGCTCTG AGAAACAGTG  
 CCTTTNAGAG TCTTTACCAA GATAAATTTT CTTTCTTCAA TCCCATCCAG ACCCAGGTGT TTAACACTGT ATACAACAGT  
 GACGACAACG TGTTTGTGGG GGCCCCCAG GGCAGCGGA AGACTATTTG TGCAGAGTTT GCCATCCTGC GAATGCTNGC  
 TGCAGAGCTC GGAGGGNCGC TGTGTGTACA TCACCCCAT GGAGGCCCTG GCAGAGCAAG GTATACATGG ACTGGTACGA  
 GAAGTINCAG GACAGGNTCA ACAAGAAGGT GGTACTNCTG GACAGNCGAG ACCAGCACAG ACCT

SEQ ID NO:1248: (Length of Sequence = 225 Nucleotides)

AATTTGGAGA AGATAGAAGT TTGAAGTGA AACTGGAAG ACAGAAGCAC GGAAGGCGA AGAAAAGAAT AGAGAAGATA  
 GGGAAATTAG AAGATAAAAA CATACTTTTA GAAGAAAAA GATAAATTTA AACCTGAAAA GTAGGAAGCA GAAGAAAAA  
 GACAAGCTAG GAAACAAAA GCTAAGGGCA AAATGTACAA ACTTAGAAGA AAATTGAAG ATAGA

SEQ ID NO:1249: (Length of Sequence = 393 Nucleotides)

CATCTATAGT CCATACATAT CTATAATGGA CAGAAATATG AGAATGAATA AGCAAAGATA CTTATGTACA CCAATAATAA  
 AGTAAGAAAG GTAAAAAAT TCATGTAATA AGAAAAATA ACAACCCAGA AATTTAAGAN TTAAGTAGTA GTCAAATCTA  
 ATTGGAATAA CTCACCTATA TAAAANACAA GAGGAAGGAA ACTTTATACA TAGGTCTGGA AAATATCACA ACTATGTTCC  
 CAGAAGANTG TTTATCTCCA CAGCATCCAA CCTAGTGTC TGCACACAGT TGGGACTCAG CCACTGTGTC CTGATTGATT  
 ATGAAGNCAG TCACTGTGAT CAACCAACA GTAATTGAAC GTTCATTTTT AATANGGTCA GTGTTAAATC TGT

SEQ ID NO:1250: (Length of Sequence = 391 Nucleotides)

CGTATGTATC TTINATITAC ACTGCACACC TTGCAGCATC CTTACCTTGC AGAGTACTGA GTCCTGGCTT CATGAATTIN  
 ATGTCAAGTA AATGGGTTTT AGTCATCCCT AGTTCATGTG CATGTNCCGA GAAAAAGGGG AGCTTCTAAA ACATGTGCGC  
 AAACCACAGG AAACAGTGCA ATCCTGTGTG TCTCTATTC CACTTACTCC TCAAGGCCCC AAGGTAGGAC GCATGTTTGG  
 TGGCTTTCTG GCTTACAAGT TCCAGTGCTT ACTCCCATTC CTTAGAGGT TTGCTGTGAT CACTGAGGGG AAGCAGAATG  
 GAGCATCGTG TGGTCTTAC TGGAGGACTC CTTGCAGCAC CTGAAACAAC CCAATGTTGT TAGAGGCAAA T

SEQ ID NO:1251: (Length of Sequence = 320 Nucleotides)

GCCTCANAAG GTCCCTCCCA GGCTTCTGCG AAAGGAAGGC ACTGCCTCTN CACACCTTGT GAAACCTTTC CAGGACCTCC  
 CAGTCAGAGG CGTCTGGTT CTCACGTGCT GCAGAGCGCC CTACAGCCTG TCTGTGGGTG AGCGTGTCTG TNAACTCTTG  
 TCCATCTCTT CTGTGATCTG TGTGCTCCTC GAAATAACTG ATTTTNTCTC ATACACCTTG GAATCCTGAG TCCACAGAAC  
 AGAGGCTCAT ACAAGGAAG CTTTCAAGA GTGCTCATG ATTTCTAGN TTCTTGAAGA CAGGCACCAN GTTTTGTCT

SEQ ID NO:1252: (Length of Sequence = 367 Nucleotides)

CRAAAAAACA AAACAGTTA TGCAAAAACA AGAGTACAAA ATGCCCTTT CTGAAGCTCA GTTTGAGAAA CTGATTTCGN  
 ATCTAGCTTA TTGATTATAC TCAGTTTCAA TTCTCCCTGT GCAAATAATA CATAAAGTCA TTAATGATGA TTTGATGANC  
 TGAAATCATC TTGCTTAGG ATCGTTTGAC ATCATAACCC AAATATAAAA AAGTTATTCA AGATTACAG AGATAAACA  
 GTCCCTCGA AACATAATTC ACCCATGTAT ATATAATANT TTNGAACAT ACTTTTAA CTAATAATCA CAGTCAAGGC  
 AGTGATAGCA TTGCATACTC AGTGCAATTAT TTCATGTAGT GCCTTCC

SEQ ID NO:1253: (Length of Sequence = 393 Nucleotides)

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TTGCTTTCAA GACAACACTC AGTTGCTAAA CCCATTTCCT TTTCTTTAGG ATATTTTCAT TGCTCCGAA TTTTAGAGCT  
 GAAAAGTGCC TTAGAGATCA TCTAGTTCAA CCTCTCGTT CAAATGGAGA ACCTGAGCCA CTAAGNITCA CAGGNGAGTA  
 AGATAATTGA GCAAACAACCT CCAAGTAATG ACAGAAAATT ATAGGAGAAT CAGTACAAAC TGTGAGAATT TACTATGTTG  
 TTAGCATCCT AAGTATGAGT TTAGAAAAGG TAGAAGTTAT AAGAAAAGTT AAATGTGTTT AATATGAATG GGATTCACCT  
 GTTACCTTCA NGNTAAAATG GAGACATACT TTTTNCITTA GGTATTATAG TTAAACGAAT ATTGTATCCN GTG

SEQ ID NO:1254: (Length of Sequence = 377 Nucleotides)

CAAAAGCAAG GAGATGAGTT GAAAGACAGT TTTCNTTAA GTTCATCAGTA TGGGATGTCA GCAGAACAA AATTAAAAAG  
 AITTAATTINC CTTTGTATCT AAAACTTCCT TAGTTTGAGC AGTAGGTGCT ACAAATTAT TTACATATCT TAGTATCATA  
 GTTAAATGTA ATGTGTTTAG GAGAGGAAAA CAAAAGATAC ATTTCNTTAA AATTCATTAA GAAATTTTCA AATTCACTTT  
 GTAGCCCATG CTGNATAGAA TTGGGCTGTG TTGGTACATT TGAAACACTG TTTATGTTGC TTGAAACACT TATTNTTTA  
 ATGCCCGATG TGATGATGCC TATGGCCGAG ATCANATATA GCTAGATTGG CTAGGCT

SEQ ID NO:1255: (Length of Sequence = 307 Nucleotides)

ACAAATGTTA GCTTCTCTG GCCTAGAAAA AGAATAGGNT CATCAAGTCA TAAAACGAAG TATGINATTT CAGCACCTCC  
 ACAAATGGC TTCATCAAAG AAGAGAATCC CATCATATGT TACCTCTCCT CTCTAGGTTT TTCAGCTGGG GCTTTCCTG  
 CCCCCTACC TATGGCAGAA CCCACTGACT CGTGGNCTTT CCAGCACTTC CACTTGCCCTC CATTAGACAC TTAACCCCGC  
 TGNCCGCTGC CTCATGCCAG GGAGGGCCAA TCTCCAGNCA ATGCTNCTGC TGGCTGTATG ATGACTG

SEQ ID NO:1256: (Length of Sequence = 326 Nucleotides)

TTGAGAAAC TGCAAGCT GGAAGTCAA TCTCTGACCT TCTTCTCTGA GACACCTTCA TGTGACAGGT GTCCCACTTT  
 ATGCCTGGAG GGAAGGAATG ATAACACAAA GATACCAAGA AGAATGTGAA GAGACCTTTC TCAGTTCCCC CCAGTTCAAG  
 ACCATTATAT CGTACCCACT TTTGTCTAAT CANGCTCTA TATGACTATC CATCTTTTAT CAAACTAAA CATAGAAATA  
 TACGATTATC TCAATTTCTG TCTTTGNTTC TGAAGGCTCC TGTGTACAT AAAACTTACA TTAAATAAAT TTGTATGTCT  
 CTCTTG

SEQ ID NO:1257: (Length of Sequence = 224 Nucleotides)

TTTITTINAGA GGGATTCTCA CACAGTCACC CAGGCTGGAG TNCAGTGGCG TNATCTTGGT TCACTGCAAC CCCTGCCCTNC  
 NGTTTCAAG CGATTCTCCT GCCTCAACCT CTCGAGTAGC TGGGACTACA GGCACCTGCC ACCATGCCCA GCTGATTTTC  
 CTGTTTINAG TAGAGACGTT GGCCAGGCTG GTCTCTTAAC TCTGACCTC AGGTGATCTG CCGG

SEQ ID NO:1258: (Length of Sequence = 329 Nucleotides)

CAGGGGTTTC TTTCCCTACC CTTTGIGAAA ACCAATCAAT TACTAGATGA GTGGATGGAT GCAGAAAAAT CTGGGCTGAG  
 CCAAAGTCCC TTTTGGAAT ACAAGCCATA ACATTGGAAG GACATCAGCG ACCTTGGCTT GTTTAGGTGA TTTTNCITCC  
 AGCTGCAGGT AGTCTTGACA AGGAGCGTTT AANCAGAAGG CTCAAGATGC ATTCTTGTG TAGGTGGGNG AGAGCACTTC  
 TAATGTTAAG TGGGGTACAG NTCAGCTGCC CCCCCAGTA GCTGGACAT CGTCTTNTCC CCATAATCCT TNNCATCCCT  
 ACAAGGTCC

SEQ ID NO:1259: (Length of Sequence = 374 Nucleotides)

GGTCATATGT TACATGCATG TTTGINCAAT ATGTGTATGT CAGGNCCATC TTCACAAATT TNCATAGCCC CTTCTGTGAT  
 CTGTTAAATA GGTATATTTA GCCAACCTC TCAGCATAAA GCTCCTACCC CAGCTGCTCC CCCTTCCAAG TGCCCTGCATC

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TGCTCTTGGC TGGGAGCTCG CTTCCCAGCC TGTAGGATGG CCACCTTGAA GGCTGTAACC CTTTAGAAGA AATAAAGTCT  
CCTTTTCTAA ATTTATAGAT TGTATGATTG TTTTAAGCTA ACAATAGCAA TGGCATTATC ACCTCACTTT CTGTGTGTGT  
GCTTAGCATA GTACCTGACA CATGGCACIT GAGTTGGTAG CTATTTTTTA ATAT

SEQ ID NO:1260: (Length of Sequence = 353 Nucleotides)

CTCAGTCAAA AATAGCAGCT GCTGAATTAG CATGGGCATA CCAGGCAAAT AAGCCTGCAT TGTCATAGCG TTCCCTTGAT  
TGCNCTATGA AACTGAGTAA AGTTTCATTT CCTGATTCAA GAATTCAGC TAAATATCC TCTGGACAAA GAAGAAGGGA  
AATTTTTTGA TAACAGATGT GTTGACTCCT TACAGTATAA AGCCAATTTT TGTCATATCT CACCAACAAT CCTGGTTTCT  
ACAGTACATC AATTTTAAAGT AATGTGCCAA ATCATGGCAG CAAAAATATG TTCCCTCTAG CTGTTAGGGA CTTTGACTTG  
NAAAACAGGN GTTTCAAATC ATCTTCTTCA TTT

SEQ ID NO:1261: (Length of Sequence = 294 Nucleotides)

TTAAACAGA CAGCTAAGAT TATAGGAATA TTTTAAATAA ACAGCATTTA TTTTAGACAC ATTTCAAATA GAAGCCACAA  
TAATCAAATA GATATTATCT GAAAACGTTT CAAAATATT AACCTTTTAA ATGTTCTTCT CTGAAAAATT AGTTTATCTT  
TAACAAATTA TTCTGAATTA TTGTGTC AAC ATATAAGGTT ATGCATATAT ATNCACTTGC TGGTCTCTAT GTTAAAGCAA  
ACTAGGTAAA AACTAGAGGA AATATCTGGA NCATAAAATG GTTAACAATT TACG

SEQ ID NO:1262: (Length of Sequence = 292 Nucleotides)

ATGATGAAGG GTTGGAGTGA TGCACCTAGA AGTGAAGGAA TGCCAATGGT TGCCAGCAAA GCACCAGAAA CTAGGGAGAA  
ACAAGGAAGG ATTCTNCCAC AGTTTCAGAG GGAGAATGGC CCTGCCAACA CTGTGATTTT GGACTTCTGG CCTCCAAAAC  
TATGAGACAA TAAATNCCTG TTGTCTTAGA CCACCCAGTT TGTGGAATTT TTTTACAGCA GAACTAGGNA ACAAATACAG  
TTTTTTTTTG CAGTAAAGAA GTTTTAAATC TGGGTTATGT CCAATGTATC AA

SEQ ID NO:1263: (Length of Sequence = 303 Nucleotides)

GGTTGAGGTT GTGGGTAGGA TGAGAAGACG ACAGGATGAA TCTTACCCCC CAGCTTTAGT GGAATTCGT GAAACACCTG  
GGAATGTGTT AGCATCAGGA GAATTCCTCT AAGGTATGAA GAATGACAAC CTGGGACCTT TCTGTAGGT GGCTCTGAAC  
CTAACTATTC CCCAAGATT CCCAAGTGGT AGGAAGGAGG GGGTGCAGAG GGATATTAAT CATGGTCATT AAGTCTCAAA  
ACATTTCTAC TTCAAGTGAA TACATTAACC ATGCTGAGGC AGTTGAACAA CTGAATGCGT AGT

SEQ ID NO:1264: (Length of Sequence = 313 Nucleotides)

GGGACTACAT CAAGCACCTG CGGACATCT GCGAGGGCTA CGTCCGGCAG TGCCGCAAGC GCGCAGACAT GTTCAGCGAG  
GAGCAGCTGC GTACCATCTT CGGGAACATC GAGGACATCT ACCGCTGCCA GAAGGCCTTC GTGAAGGCCC TGGAGCAGAG  
GTTCAACCGC GAGCGCCAC ACCTGAGCGA GCTGGGTGCC TGCTTNCCTG AGCATCAAGC CGACTTNCAG ATCTACTCGG  
AGTACTGCAA TAACCACCCC AACGCCTGCN TNGAGCTCTC CCGGCTTACC AAGCTCAGCA AGTACGTGTA CTT

SEQ ID NO:1265: (Length of Sequence = 290 Nucleotides)

TTTCTATGTG TAAGAGAAAA TAGAGATGGG TATACATACT GTTGTMTTTT TTGAGCCGAG AAAGTGTGTG ACCGGGGCCT  
CAGGTGGTGG GCATTGGGGG CTCTCTTTC AGATGCCCAT TGGCATCACC GGTGCAGCCA TTGGTGGCAG CGGGTACCNG  
TCTTTTNTG TTCAACATAG GGTAGGTGGC AGCAGCGGT CCAACTCGCT TGAGGCTGGG CCTGGGGC TCATTNTNT  
NTCCAGAG CATNTGGTTC TTTCGCGGCA CCCACCCAGC CTTGAGGATT

SEQ ID NO:1266: (Length of Sequence = 322 Nucleotides)

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OGGACAGATG TCACTCTCGC CCGAGAAGGG GGACACTGTG ATGGTGTCT TAAGCTCATA GAGTGGCAGG TTGTCTGAAA  
TGCCACCATC CACGTAGCGC ACCCCCTGGA GGGAGGGAGG GATGAGCCCA CAGTACACGG GGATGAAACC NCTGCAGACA  
TTGGCCTGGA TGAGCTCGTC CTTGGAGTTN AAGTGGGATA TAATGACATT NTGCGGTCT GACACGGGG TCAGGGAGAT  
GCCCAGGCGC CCACTGGCAT GCTCATGGCT ATCAGCAGGC AGGACCTTNA GCAGGAACT CGGGATGATC TTTTACCAGG  
TT

SEQ ID NO:1267: (Length of Sequence = 310 Nucleotides)

GTAACCCATC CCATAGGGTT GINCTATGTA TTCTTGCCAG GTGGGGTTGG AGCACCTTGT GAGCTCAGCA GCGCAACATC  
GATAGTAAGG GAGTCAGGGT TTCTTCATCT TCCTTAGAGT TAGAACTCAC TTCTACAGCC ACTGTGTCTAG GGACCACTTT  
GAGCGCCCTT GGCACCTGCT GGCTGGAAAT CAATTTAGCT GTAATGGATC TGGCCAGCT TTTCTCTCT TGGGTCATCT  
GCACTCATAG TGGTTGAAGC AAGATCTACC AGATGGGGAC ATTGAGATGG TCCCTTTCTC CTCTCATTT

SEQ ID NO:1268: (Length of Sequence = 338 Nucleotides)

GGGCTGCTCG TGAGGATGGG ACAGCATIGA CTACTGGGG AGACTCCCTT GATGACAGCC TTACACGGTT ATTCATAAGG  
AGGCAGGAAG AGGCGCTAAC AGTAAGCATG TTCTGGGTGG TCTTGGGGT GCACATGTGC AGCAGCTGTA CCTGCTTGCT  
TGTATGTTAC ATGTCTCATT AACATCTGAA ATCTCCACC GGGAGTGTGT TTTINACTAT TATAATGAGC AAAGGTTGAG  
TCTGAGGACA GGTAAAATCA AAAATGTGCA CCTCTTACG GGGGAAATC CTACTGGAG CTAGTTTGGC TTGAAGNGAA  
CTGGACTACA GTGTGAAT

SEQ ID NO:1269: (Length of Sequence = 363 Nucleotides)

CTGCTAGAGA GTATTTGAGG GTCTGCAGCA TGTGTGTAAG GCCATTAAAG ATATGTTAAG GCCATTAAGA GCAGTAATTA  
TAAAGGGGCC CTGCTAAAT AAATATCAAG TTCCCTTAAG AAACCTTCAA ATTATGAAAG TTTGAGGTCA TTATTTGCT  
ACAAATGANC TTAGCAGCTA AGNAAATGT CTGCTGCTT ATAACTAAA TATGGTATAA TTATATATTN CTNTTATGTA  
TTTCTAAAGC TACATTTTCA CCTTAATCT ACTACAAAGT AGTTTGGGA AACAAAGTAA AAGCAGGGG AATCCAATTT  
CAAATATAAT CAAATATAT

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GATAAGTGAG ACTAATGGAA TCGTTTCCCT CTAACATCAT AAAAATTTA AGGATTATCT TTCTTGAGTT CTCTGTATTT  
CTGTTTLAGA AGAAAGAAC AAAATTTGAG AAACAAGATT ATAGTGCTTT TNCATAAGTA TAAATACGTG GGCCCTATAC  
AACTGGCAA ATTCATTAGT CTTAAAGCAG ACATCCAAGC TATGTGGGT GTTGGATGA CACCATTTTC ACAGTAGGAA  
ATCAATTCAT TCTGAGCGTG GGAATCGCA TTGGTTAAGC CATGAGGTTT TATGTGGTAT AACACCTGG GAAGTGAGAG  
AAAAGNCAGC ACAGAAGCTC TGTGGGAGCT CTTCTGAGCA TTG

SEQ ID NO:1271: (Length of Sequence = 335 Nucleotides)

ATGCCTCTGG CTGTGTTGAC TGCAAAAGGT GATGTGCAGG GGTAGAGGTA GGGTACTAAT TTACAGTCAC CAAAATTAGT  
ACTGATATTA ATCAGTTTAG TTGGATTAG ATGAACAATG TTTAATGCTT TAAGGNTCAT TTTTGGCCCC AACAGGACTG  
TGCTATATTA AATGACACCG TGCCCAAAG CTCAAAAT ACATAGAAAG TAAAGTACTT CTTGAATACT AAAACAGTTA  
AGCATAAAG GTTGGAATT GGTCCCAAAG TGATATTAC TTAACATTT AATCCTACGN NCTATCTTAG CTGTACCCCTC  
TAAAAATGCT TAGGA

SEQ ID NO:1272: (Length of Sequence = 323 Nucleotides)



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GTTTTAGATA TTTTAAGATA TTAACTGTC CCCTGTGGCT TTAAAGGAAA AAATAAGTAT AAATNCITGA ATATTAAGAN  
 TTTTAAATCA GCTAAATTCA GGGCCAAGAA CTATTTAAGA TGATTCANTG AGAAAGAAAA GGACCTAACC TGGAAAAAGA  
 GTTTCAAATA TGCCAGTACG TAGGGTATTT NTGGAAATAC ACAGTCTAAA ATTAAAAATT NNACTNATC AATGGAATTT  
 AAATCTATAG CACTTTAAGG CTGTGGAGCC CAACANTAGG GENTACTTTG GGGGCACATG ATCTTTCAAA ACATAAATTA  
 GGG

SEQ ID NO:1273: (Length of Sequence = 368 Nucleotides)

GCAGCCTGGG CAACAAAGCG AAACCCTGAC TCAAAAAAAA AAAAAAAA AAAGTCTCTT AATCACAACA GCAAAGCTCC  
 AAAAGTTCAA GCATCACAGG TAGCTAGTGG CTACTATATA GNCAGCACA GACACAGAAC GTTCCAACA TCACACACAG  
 TTCTANTGGG TAGCAATGAC CTATACTGCT GACCATGCTG NCCAACATGT NTGCAGCAGT CCCTCATCCC TCTGTNGTCC  
 CCTGTTACAA GCTTAGANCC CCCTCCNNAC GCTCCTCCCC CATAAACAGG GCAAGTNGGG CAGAAGGTGG AATCCTTTTC  
 AGGGGGCAAA T

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GCAATGGGAT CTGGAGCCAA AGAAAAATAT ATCTGAGTTC TAGCTCCTCA CTAAGTAACT GTGTGATAAT GGGTATGTCA  
 CTCACCTCTT TTAGCCTTTG GGTCTTTTAT GTGTAAAGG GAAAAACATA TGCCTACATC ATAAGGCAGA TGTGAACATC  
 AAATGTTATC AGTAACTGTC AATCTGTTTT ATTAATTGTA GAATGTCCAA AATATTAGTT TGTATGGACT TCAATGAGTA  
 TGTTTTGTGG AGTGGAGTGG GGGAAAGGGA TCATTGCTTA CCCTCTGCAC ATATCATGTT TCAGCCTAGT ACAAGGCAGC  
 CATGAGCACA AAGGGCTAAG CTACTTAAAT CAGNCCCCAA ACAACTTC

SEQ ID NO:1275: (Length of Sequence = 319 Nucleotides)

AGATTACTCT TTGCAGAAIT TTGGTTAATT GTGAAGCTGA AATATCCTGA CTCTACCTCA AAGTAAATGT TTTAGGTAAC  
 TGAACAGGTA TTCNCCCAT TACTAGTATT GAAGTCAGAA TACAGAAACA AATAGTTACT GCCAGAAGCA GAATGGAAGA  
 GCCAAAAAGT ACACAAAATG GACGCCATAA ATNCTGAAAT AAAAGTGTAT GATGTGTTCT GAGTCACTGT AGAAGTCATG  
 CATTTATTAT CAAGATAGAA AAGAGCAGAG AATGACGTGG GACATTGGTC CTCGGAGGGC TTCGTANGTG GTTCGGTCC

SEQ ID NO:1276: (Length of Sequence = 324 Nucleotides)

CTGCATTGGG CAGGACAAAA CCTGCCAGAT TCAGAAGGTC ACGANTCATC TGGCCTTTAA TGCTGATATC CAGTGGAGAG  
 CTGGAGTGGG GGCTTGGGGA AATATTGACT TCCAGGACCC AGGGCTGAG GTTTTCNTCT AGCATGATGT CAAAACCAAA  
 GAGTTTATGG CAGCTATAGG GCCGTGCGAC ATACATCTTG AGCAGGCTGG TCACATAGGG CTCTGACGAG ATGATAGTTT  
 TGACAACAAC ATCCTTTATC TTCTCCAGA TGGCGTCGCT ATTGATNCC CTCTGGGCT CAGGTAGTTC CACAAAAGCC  
 TTCA

SEQ ID NO:1277: (Length of Sequence = 388 Nucleotides)

AGCAAGGCGG TGGGGTAAGT NTGGACCTTT GTGTACCAGA GAGAACATCA TGGTGGCTTT CAAAGGGGTC TGGACTCAAG  
 CTTTCTGGAA AGCAGTCACA GCGGAATTC TGGCCATGCT TATTTTNNIN CTCCTCAGCC TGGGATCCAC CATCAACTGG  
 GGTGGAACAG AAAAGCCTTT ACCGGTCGAC ATGGTTCINA TCTCCCTTTG CTTTGGACTC AGCATTGCAA CCATGGTGCA  
 GTGCTTTGGC CATATCAGCG GTGGCCACAT CAACCCTGCA GTGACTTTGG CCATGGTGTG CACCAGGAAG ATCAGCATCG  
 CCAAGTCTGT CTCTACATC GCAGCCCACT GCCTGGGGC CATCATTTNG AGCAGGAATC CTCTATCT

SEQ ID NO:1278: (Length of Sequence = 354 Nucleotides)

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GGACTTGTAC CTTGGGTGGT GAGAAGACCC TGATTGGTTT TATTAGTGCA TTTCTGTAAG TNACTGGGAT AATCATGTTT  
 AGTTTCAGCAT TTTATGTGAG TTTCTGAAAG CNCTTTAATC AACTCCATAG ACAAGATTAT AGTGTGTGCAC AGCAATAGGC  
 ATGGGCCATG TCTGCACTGG AGGTAAGTTG CAAGGTACAC CCACGGGTGA TTTATCACTC TTACAAAGAT GATAACTAAT  
 GAAGACCGCA TCTAGAATGC TCTTACTGGA GATGGTTTAC AGAGCATTIT TAATCATCAT ACTTAGATTT ATATTAATAT  
 TTCTTTTCAA ACTAAATTAT TCCAAACTGT GCCC

SEQ ID NO:1279: (Length of Sequence = 347 Nucleotides)

CCACTTCAGT GCTTCTGTGT CCGAAAAGA TCTTTTGACG CATAGGGCCT AACTGTAATA CACTTAAAGG ATAAGTCTCC  
 ACCCCAAGGT GAACATGGGT CATGTGTAC ACGCACATTA GTTCATTATC CATGTGTGAG GACCTCCTTT GTGAACAGTC  
 ACAGCTCCTC CTATAACCTG TTAATATGT ATGTTTGATC AACCCATTCA ACTTAAATNC TTGTCTTACC TCTCCTTCCC  
 TCAAAGTGCC TGGCTATACT TCCCAGCCTG CGGGATGGCC ACCTTGCAGG ATGGAACCCCT TTGTAAGAAA TAAAGTCTCC  
 TTTCCAAATG TACACATTGT ATGACTT

SEQ ID NO:1280: (Length of Sequence = 344 Nucleotides)

ATCCTTAGCA TGCCTGIVIT ACTGAGACCA TAACTTTTT TTTTTCCTT CTGCCCTCAC CCAGTGTGTG TTAAGTCTTG  
 CTTGTTAAGC TCCCACACTT AAATGGCTGC TTGCAGAATT GCAAAGGGAC TAGGGAGAGA ACAAACAG ATATGCAGGT  
 GGTGGTGTG AACCCAGACAG GATTTCTAAG GAGGGTTCAG GCAGTCAAGT GGTTTTNTGT ATGINTTTTA TGTTCATAGT  
 TTTGAGTTTT ACAATGTGTG AAGCTTACTT TTGCTAGCAT TAGGTATAGT TTATTTTGAA AGAATGAGGC TCTGAAAT  
 AAACATGCCC AGTAAACTAT ATCT

SEQ ID NO:1281: (Length of Sequence = 331 Nucleotides)

TGAGGAACAT AAAATGGCTT GGTAAGTA ATAAATCAG TACAATCACT AACTTTCCTT TGTACATATT ATTTTGAGT  
 ATAGATGAAT ATTACTAATC AGTTTGATTA TNCACAGAG GTGCTGCTCT TTAATGAAAA TGAAATATAT AGCTAATGTT  
 TTTCCCTCAA ACTCTGCTTT CTGTAACCAA TCAGTGTGTT AATGTTTGTG TGINTTTCAT AAAATTTAAA TACAATGCT  
 TATTCGTGTT CCAATGTTAG TATGTATGTA AACATGNTAG TACAGCCATT TTTTTCATAT GTGGAGTAAA AATAAAATTA  
 GTATTTTAA A

SEQ ID NO:1282: (Length of Sequence = 310 Nucleotides)

CCATGTCAA TGTAGTTTAC AAAGGGAAG GACAAGTACC TTINTATAGA ATATACAGAC ACAGCATCAC ACCACAGGGC  
 CCACGGGAGG GTGGGGGAGA CGACACTTTT TCCCTGGGAA AGGCAGCTCT AATCCAGGA ATGGTCTCTN GCAGAGGCTG  
 GGTGGCCAGG AGCACTGTCC TCTAGCCCCC TAACTCAGCC TCTGCTTCAN CTGGGTTCCC ATTTCTGCCC TCTACCCCCC  
 AACTCCTTAT AAAGAGCCCC ATGAGCTAAG ACTAAGGAGA GGTTCATNTC CCTTGGGGGG TGTGCCCCAT

SEQ ID NO:1283: (Length of Sequence = 323 Nucleotides)

ATGAGGATTA ATTATATCTG TNCACCCAC ACAGCTCCCC CATACCCATA ATCTTTATTT ATTINCTTCG TTTCTTCCTT  
 ATACCTTGTT TCAGGCATTA AACCATAACC TGTTATTTAT NCTATCCTTT TCAAAACAGG TGTGGACCAT GCACAGATGA  
 CCTATGACGG GCAGCACTGG CACGCCACGG AAGCTGCTT TNNITGTGCC CAGTGTAAAG CCTCTTNTT GGGATGTCCC  
 TTCTTCCCA AACAGGGTCA GATTTACTGC TCAAAACGT GCAGTCTTTG GGTGAAGACG TCCATGGCCT CTGAATTCTT  
 CCG

SEQ ID NO:1284: (Length of Sequence = 283 Nucleotides)

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TTTTTTCACA AGGTGAAAGA CCTTTATGGA CATGACAGAG AGGACCTGAG TTAAGAGGGA AAATACATCT NCATAGCTAG  
 GTTCACATTC AGTTATGTTA GTCCCAAACC TACAAATTCA ACATGATCCC TATTAAAATC CTACCAATAT AGTTCAAAAG  
 CTGACAAAGT TGATTGTINAC ATTTATATGA GAGANTAATT AAAAAAAAAA AAAATAGGGC CAGGTGCAGT GGCTCAGGCC  
 TGTATCCCA GCACTTTAGG AGGCCAAGGC GGACAGATCA CTT

SEQ ID NO:1285: (Length of Sequence = 341 Nucleotides)

CATTCTNATG ATGTAGAGGC CAAAATGGTA TTTNATAAAG AGGAAATTAC TTCTGANCCA CCCCAGCTGG AAACACTGGT  
 AGTATCGGCA GCAGATGTGA TTACATCCGT TTTGGTATTA CACATCGTAT TTACAGCAGA CATGACTGAN CTGGGAACAC  
 TGCCCTGTGA GACAGCCTGA AAGTTTTTTN CAGATTTTNT GTGAACACTG TCTGAATTCA CATTTGGCAA AATGATTCTN  
 CCAATTTCTC CGGCTTCTGC TAGTTTGAGG CAATCTGTTT TATGTGCCCC AGCTGAAGAT CTTTCACTAA CTCGATCTTT  
 AGAAGCTAAC TGCATTGCTG G

SEQ ID NO:1286: (Length of Sequence = 354 Nucleotides)

GCCCTATTIG TACAAAGTGT GCATGTNAGC GTGCGTGTGT GINTTGCAAT TTCCCCCTT TAGGTGGTTC AAATTGGAA  
 TTTGTGAAGG CAGAGCTGAT AATTAGAGAC AATAAAATC TGCAGAGTAG ATGGTTCCAC AAACAAGACT ATGAAAGAGG  
 GGATAAAGA AGAGGTCAAG AAAGACTCAA GAACAGTATA TAGAAATAAT TCAATTACAT TATGTGTATT TTAAAGAAAA  
 CATGTTCAAA CTGCATGAGA CAGAAAATAG CACTCNGTTA TCCTCTAGA CTTCINAAG TTTTGAGTTT GTCTGCAATC  
 TTCTTCATT AATCGNCTTT TGCCATCTTC AGAA

SEQ ID NO:1287: (Length of Sequence = 354 Nucleotides)

CTCTCTCACC CGGTGGCCTA TAGCCCCCAA CGTGGTCAGC AGCTGCCTCA GCCATCCCAG CAGCCTGGTT TACAGCCCAT  
 GATGCCTAAC CAGCAGCAGG CGGCTTACCA AGGCATGATT GGGGTCCAGC AGCCACAGAA CCAGGGCCTG CTCAGCAGCC  
 AGAGGAGTAC CATGGGGGGC CAGATGCAAG GCTTGGTGGT TCAGTACACT CCACTGCCTT CTTACCAAGT TCCAGTGGGT  
 AGTGACTCGA AAAATGTGGT CCAGCCGCCT TTCCAGCAAC CCACTGGT CCTGTGAGC CAGTNTGTGC AAGGAGGCCT  
 NCCAGCAGCG GGGGGTACCA GTGTACTATA GCAT

SEQ ID NO:1288: (Length of Sequence = 231 Nucleotides)

TTTACTTAAT TGGTATAGAT TGAGGNTCAT GCATCANCAA GCAGTTTGA AATTNTCCCC AAGTGATTCT NACCTGCAGC  
 CTGGGTAAAG AGTCGCAGG CTCTGGATA GTCAATTAAGT GAAGTGTGGT AAGCACTGAT GTAGCAGGAT TACCTGCCCT  
 ACTAGGTGCC GGAAGTGCAT TTCTTGCTC ACAAGTAATT TTTTAAATG TATGCTCGCA TCCTGCCTT G

SEQ ID NO:1289: (Length of Sequence = 329 Nucleotides)

GGACACTGTG AGGGGAAAGG ACAATTTTAA AATTCCTTTT CAAGGAAAAA AAAGGTCTTT ATGCTTTGCC ATGAGGCCAC  
 ATTCAGCTGC TATTAAACT TAATATCTTG AACCTAAAGA ATGCTGACTT TNCCTACATT TCCAGAGTTA GGCAGTATT  
 TACACTTAAA GACTACTACT ATTTINATAA AAGGTAATCT ATTCAAATTT CTTCACAGAT TTCCCTTGCT GGGGATCAGT  
 TAGTAAAGAA GGAGGAATTC CTCTTACCCA AGAGGAATTG CATTGCTTTA ATTTAGCAAT GTGAGGTAAG GCCTGCCNAG  
 TGCCCAAGG

SEQ ID NO:1290: (Length of Sequence = 297 Nucleotides)

GGAGGCACAT GTGCAGCTTT GTTCATGGG TAAATTGCAT GTTCTGGGG CTAATGTGGT TTCTTTTACA GAAAAAGTA  
 TCAGAAATAA TCGGTAACT TTCTCACAT GGTCTAACT CTCTTCAGG AAATATCTAA CTGTAAAGTG CAATCCTTCT

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TGTATAGCTG CCAGACCAGA CCCAGATAGA CCATAATAAA ATAAATACA CAGTCAGTTT TTAATGCAAG CCAGAATGAC  
TCINCTGTAT CTTTAGCCTT TCCAGGGGA TACAGTGAAC TCAGATATCC CTGCTTA

SEQ ID NO:1291: (Length of Sequence = 317 Nucleotides)

CTATAATCCC AGAAGTTTGG GAGGCGAGG TGGGCGGTC ACCTGAGGTC AGGAGTTGAG ACCAGTCTGG CCAACATGAT  
GGAACCCCAT CTNTACAAA ATAAAAAGCA AGATATGCAA AATAATGTGC CAGTNTGGTG CCGTATACCT TTAGTCCCAG  
TTACTAAGGA AGCAGGGTGT CTNAAACAGA AGAATCACCT GAGCCAGGG AGGTCGAGGC TGGCTAAAAA TAGATCTGGG  
GGTAGTGGTT AATNGGGCT TGTGAATNAT TCAGCATAAG GAAGTGTCCA ATATTTTTTT AAGCTGTCAG AAAATCC

SEQ ID NO:1292: (Length of Sequence = 293 Nucleotides)

GAAGATGGAA ATAGACCACC ATACAAAACA AAAAGAGCAG AAGAGAATAT TAGCACTCTG TTGCAAAGGA GAATAGGTAT  
GCTCAACTGG TAAGTAGAAT GCRAATATTC CAATATCTGA AAAAAATCCC AAATCCAAA TACTTCTGGT TCCATGCAIT  
TTNCTAAGG GATACTCAAC AGGTATTTTA AAAGATCAAA ATACAGATCA GAGAATATGG ATACTTGAAG ATTATGAGCA  
AACGAGGATT AAGNAAACA TGTGAGGA CTTTTTAAAA ATGTGTAAA GGG

SEQ ID NO:1293: (Length of Sequence = 310 Nucleotides)

TCCCAGAAAC ATTACGGTTT GATATCAAGT TCCTATTTTA AGAGTCACCC ATTTGCCAC CATAAGTNC TGGAGAAGGT  
AGGGTATTAC AGGACTAACC TTCCAGTGGC TGATCTGGT GGTTCACCA TTCAGGTTTC TCTGATTTIN ACAAGCTTTT  
TCCCATAAAG ACTGCATTIN CTTTAAAGC TTCTCCTGCA AAANAGCCAT AAATTGAAGC ACCAGTGAAG ACAATAAGT  
AACATACAGA CCGTTTCATT GGGAGGGGGC CCNGAATGNG AGACAAATAA GTCCCTAGTA AATGGCATT

SEQ ID NO:1294: (Length of Sequence = 275 Nucleotides)

GAATGACGAT GTCAGGGGCA TCAGGAAAGG TAAGGGCCGG GAAACGSGC CCTTGGAGAA CCTTGCCAG GGGAGGCCA  
GCTACTCAC AGGNTCCGAC ACTCCAGGCA GAGCAGAGGG CAGGAGAGGC CCAAGAGCT AGGTCAAGCA GCTGGCTCCC  
CTGGGGTTAA ATACATGGGT TTTGTTTTA CTGCTGTGCT TGATATACAT GAAGTAATGA ATACCAAGCA ATTCATTTTT  
CCTGCATCIT TACTTTTACA TTGTINCTTA GGTGCCTAA AACATTNAA ATACAATAAA ATGAGTGTAG CAAAATTAT  
TGAAGCT

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CAACCTCTGC CTCOCAGTT CAAGCGATTC TCCTGCCTCC CGAGTAGGTG GGATTACAGG CATGATCCAT CAGGCCAAC  
TAATTTTTTA TTTTATAGTAG AGATGGGGTT TCTCGTGTG GTTCAGGCTG GTCTGAGCT CTGACCTCA GGTGATTAC  
CCACCTCGGC CTCCTAAAGT NTTGGGATTA CAGGTGTGAG CCACCGCGC AGGCTACTGG TCTCAATCT TTTGGATACC  
CAGAAGCAGA AATGCTGGGA TCACATGGTA GTCTC

SEQ ID NO:1296: (Length of Sequence = 247 Nucleotides)

GGAAGGAACA ATTGATAAGA ACCGGGGACA TCAGGAGAG AGAGTATTTG AGCTGGGCTT GATTCCATCG GGTAGTATCT  
GGAAAAAAA AAAAAATCC CAGATGAAAG AATGTACAAA GACATGAGCA TGCAGGCAC ACTTTGGAAA ATGGNGAAG  
TCTGACAGGC CTGGGAGAAT GAAGACAAGT TAGCACCAGN TTNAGAAGGC CTTGATTACA NGCCAAAAC TTTTGATT  
TACACTA

SEQ ID NO:1297: (Length of Sequence = 246 Nucleotides)

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GACTTCTTAC AATGCAGCAG CAAGAGAAAA TNAGGAAGAA GCAAAAGCAG AAACCCCCAG TAAACCCATC AGACTTCGTG  
 AGACTTATTC ACTATCACTA GAATAGCATG GGAAAGACCA GCCCCCATAG GTCCACTACC TCTCCCTGGG TCCCTCCCAA  
 AACATGTGGG AATTATGGGA GATACAATTC AAGTTAAGAT TTGAATGGGG ACACAGTCAA ACCATATCAT TCTGCCCTTG  
 GCCCC

SEQ ID NO:1298: (Length of Sequence = 263 Nucleotides)

CATTGCACTC CAGCCTGGGC AACAAGAGCA AAACCTCCATA TCAAAAAAAA AAAAAAAAAA GAATTGCTGA CCTTTATGTG  
 TTTCTGTITA AGTTCACAAC AGTCATAATT CTGTAAATA CAAGGCAGAA CTGTAGTTTC TGATACTAGT AATATATCTA  
 ANTCAGTAAG TAAAAAGGAT GTGTAAATC TTAATAGGGG AAATAATTAT TGTATGANCA AGCAATTTCA AAATCAAAG  
 NCACGTTTCA GTATATATTA TAG

SEQ ID NO:1299: (Length of Sequence = 272 Nucleotides)

ATCTNATGT TGIGTAGITT ATGGCAGTGG TCTCCAGACT TTTTGGCACT AGGGACCACT TTAATGGGAG ATAATTTTCC  
 CATGGACGAG GGGATGGGGA GGAGGCAGGG GTGGTTTCTG GATGAAACTN TTCCACCTCA GAAGATCATC AGGCATTAGT  
 TTCTCATAAG GAGGCAAAAC CTAGATCCCT TGCATGCACA GTTCACAATG GCACTCGTCG CATATNCCGT CGACAACCCT  
 TTTTGGAGGT TCCATGCTTC CCATTGGCT TT

SEQ ID NO:1300: (Length of Sequence = 277 Nucleotides)

ACCACTGCAC TCCAGCCTGG GTGACAAGAG TAAACTCCA TCTTAAAAA AATGTGTAAA ATGAAGATTA TCATACTACC  
 TACATCATAG AATTGTTTTT AGTGTAAAT GTGTGTGTGT ACAATTTATGT AATAGTTAAC ATTTAAAGAG CACCTACTTT  
 GTGTAAACAT ACTTTGTATG AGATACTGTT CAAATATATA TNCTAATATA TGCAACATAT TATATATGTA AGAATAGGGT  
 CTTATATATC TTAGGAAGTT AGATCTTATA TGTTTGA

SEQ ID NO:1301: (Length of Sequence = 304 Nucleotides)

GGTTCGGGT TATGTAAATC CCAAATTAT GAACAGGAAA TGGTACAGT GCATGATAGG TTAAATTTIN CTTTATTGTT  
 GTCCAACGCA GGTCTTTGG AGAGAAAAA AGATCACAGT GCTGACCAGG TAACTCAATA GGTTAAGTCA AGGTAACCAT  
 TGAAGATAA TAGGATTAGG GAGGTGTTTA TTTTATGGCA TCTTCTCTCA TGGAGTCTT AGCACTTCGG ACAATTTGTC  
 TTTTCCAC TTTGTACAGC TGTATGTTT CATTACCCAG CCGCTGTAT TTAACCTGCC TACT

SEQ ID NO:1302: (Length of Sequence = 335 Nucleotides)

AGTTTATTGC CATAAGAAA ACATTTTATA AAATAATATG GTAGACTTCT ACTTCAACAT ATTCACGTAA AAACATCACA  
 GTGCAAGAAA GTGATCACA TTAAGCATGA AGACATCAA AGCCAGCCAG TATTTTAACT ACAGAGCAGA ATATTCTTGC  
 TGTCCCTTCC TAGAAAATGT TGSCACATTC ATTAACGTCT CAGGTACAA AAATCACTTC GTGTCCACTT CCTGTCCTTC  
 AATATATTIN CATACTACA CTGTGTTACA TTAATGCTGG TGGACAAAT AGCTCCTATA AAATCTAAAA ACCTTTTCAG  
 GTGGGCACAA TGGTT

SEQ ID NO:1303: (Length of Sequence = 316 Nucleotides)

TGGAGCTGTA TATGGTCCGG AGTATATGC AGCATCCAGC TTTCAAGCAG ATGINTCCCT AGGCAATGAT GCAGCAGTGC  
 CCCTATCAGG AAGAGGGGGT ATCAACATT ACATTCCTTT AATCATTCTT GGCTTCCCTT ACCCTACTGC AGCCACCAGC  
 GCAGCGCTT TCAGAGGAGC CCATTINAGG GGCAGAGGGC GGACAGTATA TGGTGCAGT GCAGCGGTAC TTTCAACAGC  
 CATCCCCGC TATCCAGGTG TGGTTTACCA GGGACGGATT TTACGGTTGN TGACCTCTAT ATAGATTCTG CAAACT

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SEQ ID NO:1304: (Length of Sequence = 211 Nucleotides)

TATTTTTCNC TTCTCTCTC CCTACATATA TTCTAACCT TCTAAAGTTT TTINATTTT TTAAGGATCA CTTTATCATA  
 AAATAAAATA TCCTTTTCAT ATAATAAATT ACCTAATAAA AAGTCCTTTT TTTTCATATT AGCCAGGIN CTTTGCTACA  
 TTTATATGGT AATAAACGCC TTTATTAAAA TAGANTATTA AATTATAAG A

SEQ ID NO:1305: (Length of Sequence = 316 Nucleotides)

GAAATGATTC AGGGAAAAA ATTATAGTA CGTTTTCAAC TTTTTTTTTT TTTCTTGAA ATGGAGTATG GTCATAAAAA  
 GGACACTAAA TAACCTGATT AAGCTAGAGT ATAGACCAA TTGCCACTTA CTTTGAATTG TTTTACCAA AGGTATCACT  
 TTGAATAAAG ATAACCTTCA TTAGACATCT ATCTTTATGT GTTCTGCCA TCATTTCACT GAGATCAGAG GAAAGTTAAA  
 TTAGGAACAA TGAAAAAGCT TAAGAAATGA ACAATCATCA TGCTTTTGTG TATGCTTAAA GTGAGTACAT GTAAAA

SEQ ID NO:1306: (Length of Sequence = 310 Nucleotides)

GGGATTTTT GAAGGCTTCG CTGTGGATGG CCGAGAACCT GCTCGGGTG TAGGTCTGTG TGCTGGGGG ACAGTTTCCA  
 CATCTGAGCA CACGGACTGG ATTCTGAAA TGTCAAAGTC TGATGCATCA CTGCCTGGC GGCTGCTGGC CTTNCTGCCA  
 GCTTTGCTTC CAGCTCGACT TCCTGGTCGG CTGGGAGTCT TCTTGAATC AGCAAACTGT GTTCGGACTC TGGCAGNIGC  
 AGTTGTATC AAGCCACTGT CCTCCCCANA GTGAAGCCT TTCCCTGATA AAAATCCTGG AAGTCGAAGC

SEQ ID NO:1307: (Length of Sequence = 302 Nucleotides)

TAATAAATAG TATATGTAGT GAAGAAAAAG TTATAACRAG TATACATTAC ATTTAACACA CCTAGCACAT AGGACACCT  
 CAACAAACAG CTACAGCTGC TGTAATCAT GGTATATAA TATAACATGC AAGCATATCT TCATGTATG ATTAATTAAT  
 ACTTCTTGA AAAGGATCTG AGGAACATAT TTAATATATT TNATATGCCT GTCATATGT NCATTTAGTG CTTATCAATT  
 ATATTAGTG CTTTTCTATT AGCTTCATCC ATTTGATTAA GATAGCAACT TGTATTATTT AA

SEQ ID NO:1308: (Length of Sequence = 285 Nucleotides)

CGCCGCCAA CGTGGCTTC CTCTACATGC TCTGCAGGA TGTTATCTCC TCGAGGTGG GCTCGNTCA CGAGCTCCAG  
 GCGTCTGC TGACATGCT GTACCTNCC TACTCTACA TGGCAACGA GATCTCTAC CCGCTCAAGC CCTTCTGGT  
 GGAGAGCTGC AAGGAGCCT TTNGGACN TTGCTCTCT GTCTCAACC TCATGAGCTC AAAGATGCTG CAGATAAATG  
 CGACCCACA CTACTCACA CAGGTCTCT CCGACCTGAA GAACG

SEQ ID NO:1309: (Length of Sequence = 319 Nucleotides)

TTTCCAATTA TTATTTGCC AATATCTCA ACTCTTTTC CCACTTTNAT CTTCATTCA ACCCTCCCTG CAAAATCCTG  
 ATCTAAAAGC AACCCAAGTA TTGCTCTT CAACCTCCA GCTGCTGAGT GGTTTTGGGA ATTACACAAC CACTAAGCTT  
 GGTGCAGATG CACTATGGCC TCAATAGAGT CCCCCAGTC TGCCACTTT CTCTTCCAT ATTTCTCCAC AGCAGCTGGT  
 CAAAATACAT TTTTCCCAA ATGTCTTACA CAACCCCTT CTCTTTATC ATCTTANCT CACCCACC CAGTTCTT

SEQ ID NO:1310: (Length of Sequence = 356 Nucleotides)

TGAAGTTTT CTCTGTGCG CAGTCTGGA GGGCAATGTG CGATTTGAGC TCACTGCAAC CTCTGCCTCC GGGTTCCAG  
 CGATTTCTCT GCTCAGTAT CCAAGTAGC TGGGATAATA GGCACTTGCA ACCATGCCCA GCTAATTTTT GTAGTTTATG  
 CAGAGACGGG GTTACAGGT GTGGTCAGG CTGGTCTTGA ATTCTGACC TCGTGATCTG CCGCCTCGG CTTTCCAAA  
 TCTTGGATC ACAGGATGA GTCACGCAC CTGGCCTAT ATCTGCTTC CTATCTGTG GGTCTGCTG TATGCTTTT  
 ATTTATTTCA ACCTGCAGTT GTTGCAGAA CATCTG

SEQ ID NO:1311: (Length of Sequence = 331 Nucleotides)

AGCTCAGATT CATGTCCTGA GCCAAACAAG TGAATGTATC TNAGAAGACT CAGTACCACA TGGTACTGGG AGATCTTACT  
CACTTCAGCT GCGGTGCTC ATTAGTGAAT GTATGACAGC AGGATGTGAG GGGATGCCCA GGAGTCAGTG TTAGCATTGT  
CATCTGAGAT CACTGCTATT AATATCATCC ATTAATTTAT TAGTGAGCTT CACTATATGC AGACTGGGAG ATAAGGAGAA  
AATCTGTCAC ATTCTCTCTA GCTAATCAGA TCAGCTACCA ATTAATGAGA TTCTGAATGA AATATCAATA TGTGTTTTTC  
TAATTTGGAC C

SEQ ID NO:1312: (Length of Sequence = 347 Nucleotides)

TTTTTTCCTT TATAAATTAC CCAGCTCAG ATTTTTTNAT AGCAATGCAA AAATGGCCTA ATACACTTCA GAACCTGGAA  
GATTAGCAGT GAGAAATAAA ATCAGTTAAG TTGATGACTT CTAGTATTTT ACTACATGGT TGTTTTGCCA AAATGAAGGC  
AATATCAGTG TCTTCACACT TAAAAGTAG TATATTGANC TTGAGGTGA AAGAGCTGGG GTTTAAATTT GINCTTTACC  
AATTATTGAG ATAAGTGTCC TTGAGCAAGT TACTTGCTTT CNCTGATCTT TAGTTTTCTT ATTTGTGAAA TTGAAATGG  
TGGTGTTC GAGGGGGTT GTATATA

SEQ ID NO:1313: (Length of Sequence = 336 Nucleotides)

GAATTCCTCT ATCAAAGTGT TCATAAAACC TGGAGCTGCA GCTGCCCCC ATTAGGTAGT TTCTTGGTGA ACGTTTTCCA  
AGGAAAACCT TTTTAAACA ACTTCATAAA GCCAAGCACA AAAGGACATT GCAATGACTG GCTGAAAGAC ATGGGACTTT  
TTGTCTTGA CGACTAAAC GTTAAATGGG GGCTTACTTT GTGCATTTAT GGAAGAAAAC TTGGAAGGCA TTAAGGCTA  
CATTTTGAGC CTTGCATGAT TTCATTCATT TATGCATGAA TTCATTGT CAACATTTAT TTAGTACCCA CTATATGCCA  
GGCACGTGC CAAATG

SEQ ID NO:1314: (Length of Sequence = 391 Nucleotides)

CGGTTTAGA CCTCAGTCGG CGCTGTGAGG GCACTGTCCG CCCACCTGCT CGGCTGGCTG AGCTAGGTCA GTGGAGAGAA  
GCTGGGGCCA CTCACACAGC ACAGCAGGCC ACAGTCTACA GAGTACGCCA GGTAGAGCGG TTAGAGTGGC AGCCGCTGGA  
GAAAGGGTA TAGAAACACA TCCCTGACTC TTGGTTATG TCCACGTCC TCTGTGCTC CTTCCCTTC CTTACTCTCC  
TTCTTTCTG CTTCTGTG TCCCTTGGA GTCCCTGTG TCAGTGCAAT TNAGTGCAAT GACGTGCTCT AAACACTGAT  
CTNCACACAC CTTCTTTAT CTTCCACCTG ATAGGCAGGC CCCAGANCC CTTTTTCTCT AGCTTTGTT T

SEQ ID NO:1315: (Length of Sequence = 374 Nucleotides)

GAATTCCTG GAACACTGGT GTTACAGAG AGAGATACTT TGTGGAATGG AGCTTACATG ATGAATGAAA AAGAGACCGT  
TAAAAAGTAC TAGCGTTGT TTACAAATAA CTACCAGGTA AACAAAGAAA TCACTTTCTT TCCCTTTCT AAGGATAAGG  
GAGAATAAAA TAATCACCAA GAGGCATGGA GTTGAAAAG TATATAACAG ATTCTTTTAT TATTATTTAC AATCAAGTTC  
TGTGGNCAA CATAATGAAA TAAATAAAG ATGTGCCCTG GCTGTGAAT TTCAACTCTC CTTGACTTAA GTTCTCTGAA  
GGCAAATG GAAAGCGGTG ATCAGGCAGG GAAGAGAGG CAGGTGGAGG CCAG

SEQ ID NO:1316: (Length of Sequence = 353 Nucleotides)

CTGTGTTACA GGTTTTGAAA GGTGTGAG ATTAGTATTT ACTTTTAATT TTTTGAGTAA TAGAATGCGT TTAGGTCTA  
AATTACTATG GAAATGGCAT AGTGAGGATT CTNCACAGAT ATTAGAGACC TTCAACAACA TAGTGAAAAT AGATTTGTCC  
TTTCTGTAA ATAGCTGAAC TATGAAAATT TGANCTGTCA CTGGAGGGGG CATTTGCNCT GAAGTTGCCC AAAGTAAAAA  
TAACTTTTCT CTTTAGTAAG AAAAGCTAT ATTTTNCAT ACTGCCCTGC ACAGCAACAA AACAAATCTT TGTGTTGTT  
TTAATATTGG CAAAGGAAAA ATTCTCTATA TAA

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SEQ ID NO:1317: (Length of Sequence = 316 Nucleotides)

GAATTCGGAT TATAAGCATC AATATGCATA AAATGCTTAG AGATGGACCT GATATATAGC AAACACTCAG TAAATGTTAA  
 CTATTATTAT NACAGCACAG CAATTTATTT AAGATTACTG AGTGTTCAAA TGAAAAAAAA GACATATTAA CTTATATAGT  
 GCCATTTCTG ACATAAGAAA TACACAAATA GAGGTAGTTT CTGAAACAAA GATCAAAAAA ATCTATTGTA TGGTGTCTTG  
 TATCAATGTG GCTAAAATTT TCGAGCTAAG TTTTAINAAA GACAGATCAT ATTTCANGTA GGTGATTTTT GTATTG

SEQ ID NO:1318: (Length of Sequence = 300 Nucleotides)

GTGGGACTAC AGGTGCACGC TATCATACCC AACTAATTTT TGTATTTTIA GTAGACATGT GTTTCCTCAT CTTGGCAGGG  
 CTGGTCTGAA ACTCTGACC TGAGGTGATC CACCTGCCTT GGCTCGCAA AGTGCTGGGA TTACAGGTGT GAGCCAACAA  
 GCTGGGCCA TTTATTTACT TTTTAATTTT CATTTTCTT CATCATGTAG AATGGACAAT TTCAGGAAAC TGATAGAAAA  
 TACTGTCTAA CATCAAATTT TCAAAAAAGT TTCTCTGTAA CAGATAAGGC AGTCAATTTT

SEQ ID NO:1319: (Length of Sequence = 306 Nucleotides)

CAATAAGCTT TAAAAAGTTA GTGCCACATG ACCAGCATCG ACTGGCCTCA GACATCTGCA AGCACTCACC CAGGCCACAG  
 GGTGAGTAG AGGGCTCTG GGCCCACTGT AGCCCTGCT GGGTCAGTGT AGCTGGAAGG CTACGGGNC TTAGTGGGGA  
 GCCACAGCCT TTCCCACTAG GGGGCTCTC ACTCTGACAT CTCCCTGTGG TGTTCGGACC AAGGGTGGG AGGGAGACAC  
 GCTGGCCCTA AAGGGAGGTG GTAATNAGTG AAGATCTCCA GGGCCAGNCC ACAGGGCTCC GTCCAT

SEQ ID NO:1320: (Length of Sequence = 373 Nucleotides)

GGTCTTGATC TCTGACCTC GTGATCCACC CGCCTGGGCC TOCCAAAGTG CTGGGATTAC AGGCGTGAGC ACCGTGCCTG  
 GCGAGATAA TTATTTTINA GTGAGGATTT AGCAACCTGA AAACCTTGGG TCTTTGGGAT ATGACCTCAG TATCAACACA  
 GAATATTGA ATGCTGGTTA ATATATTTNT TTTAACTGT GATAGAATTG AAATCTTGTA GCCACATTTT GAAAGTTTAT  
 TCTTCATTAA CTAGTCTTTT CTCACCTGAT TTTCTACAAG AGAGAATTTT CCAAAGGTT AGTTGTGTT ACATTAAGAA  
 CTGGGGTTT GNTTGACATG AAATGTTTCT ACACCAGCAG GTCTCAGATG AAT

SEQ ID NO:1321: (Length of Sequence = 366 Nucleotides)

GTGTGGCTAA TCATCTATG ATTTTCTAT AGCTTGAAAA CTTTTATAT CITAAATTTT TINATAATTT TGAAGTATTA  
 TGTGTGGGC TTGTATATC CAGTGTATTT TCAATTAAAT TCCCCTAACT AAAGTAATTC AAAAGGAATA AAAGTGTAT  
 GTGGGCTGGG CGTGGGGCT CATGCTGTG ATCCAGCAC TTTGGGAGGC CCAGGCGGGC AGATCACCTG AGGGCAGGAG  
 TTGGAGACCA GCTGGCCAA CATGGTGAAA CCGTGTCTCT ACTAAAANTA CAAATTAGC CGGGTGTGGT GGCACATGCC  
 TATAATCCA GCTATTTGGG AGGCTGAGTC AGGGAGAATC TCTTGA

SEQ ID NO:1322: (Length of Sequence = 362 Nucleotides)

AGGGAGGGTA AAACAAATCC CCCTCCAATG CTTTGTAGAA GGGGATTAGA ATCACTGTGG AATTCGGTAT TGGCTAATAA  
 AGTATAAAG CTAAAGATCA ATGCTGAGT GCACAGTTGT CCTCAAGCC ATTGTACTTC TGCTTTCCAA GANTAGANGA  
 CTACTTTTIA ACCAAGANTT AAAATAANC TCATAATTTA AACACCTCTT TCATGCCAAA TGGAAATCTT AGTGTGTAAT  
 AATCAGGCTC ACCTGAATAC AAAGTGTGCC TGAAAATGCT GACAATCACA AAAAAGGTTT TAGAAGCTTT TTCAAAAAAC  
 AAGTTCAGAT GGTTCCTACT GAGTACTAT TTGAGGTAA AG

SEQ ID NO:1323: (Length of Sequence = 244 Nucleotides)



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CGACCTCAGT GTAAATCACA AAACGGGAAG AGCTGATATT GGCAAAATAA TTACATGGCT CATTTCCCTG CATGTCAAAA  
TAGGATTTGA TTGGTTGTAA AAGATGACAA ATACCTTTNC GGTTTCAATG TTCTTAAGTG GGAAGTCACT TATTACAGAC  
CTNATGGGA GTAAACAAAG CTGTTAGACC TTTCAATTATC AGTCCNNTTA ATCCCTTCAA TAATCCCCCT AAATCAGTGA  
GGCG

SEQ ID NO:1324: (Length of Sequence = 279 Nucleotides)

GATCCATGCC ACAGTGACCT CTGTAACCTT GCACAGCACA GAGGGGAAAG CCCTGTACCA GGTGGCGTAT GAGAATGAGG  
TAGGCAACAG CTCTGACTTC TATGACATCG TGGTCATCGC CACCCCCCTG CACCTGGACA ACAGCAGCAG CAACTTAACC  
TTTGACGGCT TCCACCGCC CATGATGAC GTGCAGGGCT CTTTCCAGCC CACCGTCGTC TCCTTGGTCC ACGGNTACCT  
CAANTCGTCC TAATTCGGTT TCCAGACCC TAAGCTTTT

SEQ ID NO:1325: (Length of Sequence = 338 Nucleotides)

TCAGTTATTT GGTGTGTGT GTGTGTGTGT GTGTGTNCAT CTGCAAAACC TGCACTTCAT TATCCAAAAA TTATTTGATA  
TTTTATAATC AGAGAAAATG CTATTTTAA ACCCTACCAC TGCTGACCAA ACAACAATCA CAACAGCATA AACTAAATA  
CTGTCAACA AATCTATTTT AGTGTAGTAA TTAAATAATT CCTAAATTA TAGACATCCC TAATATTCCT TCCTTAGTGT  
GTTCTCAGA GTGCAATCTG TGGAGCAACT ACCTTGAAGA AATTGGGGG AATGAGACCN TGGGAACCTT AAATGTTTAG  
NATGTGCTC TNGGGGAC

SEQ ID NO:1326: (Length of Sequence = 393 Nucleotides)

AACTTTGGAG GGGACACCAT CACTCAAACC ATAGCTGTAA ATCTATTCCT TGAGTCCAGA TCACAAATTA CCAATGAAC  
ACGTTCTCCA TTTTITAGTAC TTTTITACCT GTAACCTCT GTCTACCTAA GATGAATATT TATTCAITGA ATGAATCAIT  
TAATTTTGGT GCCCCAAAT TCTCAGTGAA ACAATTTCTG GATACCTCTC CATCACTAAG ATAATCACTA TAGCAGTGT  
ATATCTTCA ACTTGNACA AATCTAAAGG CTCCATTTAT CCTACTAGA AGTGTCTGT TGTCTTTTC ACTCTCAAAA  
TATCTCCAT GGCNAACCA AACACTAANG GGNACCACCA TATCTGTCTC AATGGAGCN AAATCACTTT TTA

SEQ ID NO:1327: (Length of Sequence = 381 Nucleotides)

CTTTGGAGAA TTAATTCAGC AGTTGGTAAA ATCAITCTAT AATAATGGGT ACCATTCGTC TCTGTCCAC ATTTTATGA  
AGTCTCTTA AATTTAAAAA GGCAATGTGC TTTGTGGTTC TTGAGCAACT TAAATAGTGT GCTCTGAATA GTTATTGTGA  
TGAGGTAAAT TGTAACAACT TTTAGGATCA ATGCTAATTT NCTTAAATGT TTCTGTAGTT TCCCTTTTAT TATAAGTAT  
ATTAGGCTGG ACTCTTGGCT GTAAGTGGCA GAAACTCAA CTCAGATTAG TTAAGAAACA AAAGGGTGT GGTGACAGTG  
GTGGCTTCA GACTATTGCT GCAGGCCAC CTGCCATCT CTTACACCCT CAACATACCC T

SEQ ID NO:1328: (Length of Sequence = 289 Nucleotides)

AGAAGAAAAT TCTTAAGCAG AGTACTTAAG TACAAAATTG AGTGACTGAA AGATGCTTAA TCTAGGGAAA TTAAATGAGA  
AAAATACATG GTGTGTGINT TGGAGGGGGA GCTGGAATTG GAATGGGCTG GAGTGATGAA AAAAGCCAA CAGATATAGT  
CTTCTGTTT GTAATATAGG CTCAATACTA AATTATGTAG GACTAGATAA TCTAGGTCTT AATGTCTCTT TTTTGTGGC  
AACCTGGGG CCAATTACAC TAGAGGGTTG GTAGAAAAA GAGGAATAT

SEQ ID NO:1329: (Length of Sequence = 364 Nucleotides)

TTGTATATTT GGAATTTCA ATAATCTAGG CCACGTGGAA GATAACAGG TATTTTGGAT ATTTCCTAT TGCTATCTT  
ATATTTCGT GTAAATGCCT ATACAAATGT TTGCTTGGTG ACATATGGAA AACTTAAGN CTTTATGAA AAGGCGACAA  
TGGGGACCTC CAAAGCGCA AAGTTCTGC TAGGCATAGT GTTATTTTGA GATTACATTA AAATGGCTAT TTAGACCCAT

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CTAGCTGAGA CTATTCCAAA ACAAACTTTT TATCANATTG TNATCATAAT CAACTTTCTA CAGGCTAATG ACTTTATAGN  
TTTACTNCTA GTGTATATCT ACTAGCACAA TTGGACCCAG TTCC

SEQ ID NO:1330: (Length of Sequence = 221 Nucleotides)

CAATATTTAA ACAAAATGCA AACTGAACG TTACCTCAA ATGAAACAGT GTGTGTACTG GCTGTAGAA GTTGATGGCG  
GTCTACTGTT TGATATTCAC TGCCATCTTC CTCTGCCCCA CTCTACCTCA ACTCGGGACC GCTCACCTA ATGGTGGGCT  
TTGCCGCTTT ATGCCNTGTA GAGNAGACAC TGGGTAAACCA CAGCAAATCA ACACGGGNTC C

SEQ ID NO:1331: (Length of Sequence = 279 Nucleotides)

AATAGAGATA ATGGTCAACT CTGAGAAGA ACCAAATGCT GGTGCCATCT TGAAGTGCT ACATCACCTC CTCCTCTTAC  
TTCTTGAAC AGCAATATTT CTGGATTCT TCTGCAAGCC CCAGGCAGTG CAGGATGCGT TTNTTTCAG CAGCCAGTTC  
CTTCTCAGAG AACTGGCCCA AGAGTTTCTG GACAAATATA TTTTGATCTT TCAGAAATAT GTTCINATTC ACTCCTACAT  
TTGGCACATT NTCCAAGGGC CCAGACTTGA AATTGGAGG

SEQ ID NO:1332: (Length of Sequence = 290 Nucleotides)

GGACGAGGAG ATGTCTTTGG TGGACTTGGG AAAGAGGTTG CTAGAAGCAG CAAGAAAAGG CCAAGATGAT GAAGTGAGAA  
CGTTGATGGC AAATGGGGCC CCATTCAACA CAGACTGGCT TGAACATCA CCCCCTCACC TTGCAGCTCA ATATGGTCAT  
TATCCACAG CAGAAGTACT CCITGAGCA GGTGTAGCA GGGATGCCCG GACTAAAGTA GACAGGACCC CCTTGACAT  
GGCTGCAGCC GATGGACATG CGCACATCGT GGAAGTCT TTTTGGAAAT

SEQ ID NO:1333: (Length of Sequence = 201 Nucleotides)

CGCCAGCTA ATTTTGTAT TTINAGTAGA GACGGGGTTT CATCATTINA GTCAGGCTGG TCTCAGACTG CTGACCTCAT  
GATCCACAG CCTTGGCCTC CCAAAGTACT GGGATTACAG GCATGAACCA CCACGCCCAT CTGATTTCCC GTTTTCTGCA  
GGGTAAAGNC TCAGGGCCGG CCCATTGNTT TCAGGANTTT T

SEQ ID NO:1334: (Length of Sequence = 267 Nucleotides)

NNATAACTTT TGTGTGAAT TTAGAAAATG TGGATCTTTT ATACTTGCTT TCCCTTTTCT TCTGCCATCT TTATCTTCTG  
CTGAAGGAGA CAAACAATAT TTAGGTGAC ATCTATCACT TTAGTLAGGA CCTGCAAACA CTCATGTTGT CTTCGGACAG  
ACAAATGGAG AATGTAAATC TGTTACACTG TGACAGGATA TAATTNTGGA TTGCATAGN TTNCAACAAA GTGTCTGTGT  
GATGANTAAA TGGTAAATA TATTTAT

SEQ ID NO:1335: (Length of Sequence = 279 Nucleotides)

GGNTCTTGT AGAATGCAGA TTCTAATTAA AAATGTGTAG GACAGGGCCT GAGACTCGGT ATTCTAACA AGTTCCCAAG  
TGATACTAAT GCTACTGCTT CACAGATCAC ACTTTAAATA GTAAGGTTCT TGAGAGAGAT TAGTCTCAAG AGAAAAGAGA  
CAAAAATCTC CAGAGCAGGA AGACCAAGAA AAAAAAATGG AAAGTAGCCA GTGATTATC AACTAGATGG CCTTAGTGAG  
ATTCTGCACA ATATTTCATC ATACAAAAC GNTTCCCA

SEQ ID NO:1336: (Length of Sequence = 398 Nucleotides)

TTTTTAAAGC ACTCTGTGT GGAAGGTGCA AAGATGTCC TAAACAACA TTGCTGTAC CAAGCCTCCC ATGANTTAGG  
CAAGTCTC CCATGTGGAT ATCTGCTT CATAGTTA TGAAGAGGAA GATCTCTAG TCAATCTTC CAGCTAGGA  
ACCCCTAGGA AACCCGCTG GTACCTGGCC TGTTTTTGT AAGTATACAT CAGGCCAGG GGCTGCTTGC CAAGCAACAT  
CATGACTGC ATACTGTTTA GTGCATGCAT TACCAGGCT CAAACATCCA AGTGATGCTA CCTGAATAAG TCGAGGAATT

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TTTGATAATA AACATAAGCC AAATCCAAAA AAATGTCTG GGTITTTTCCA TCATTTCCAC TCATTAGTNC CAGGAAAA

SEQ ID NO:1337: (Length of Sequence = 272 Nucleotides)

CTTTCCTCAG TATCACAGGT ACCTGTITIN CTGGAATTTA TTTAAATGT CACCTTGTAG TGTTCCTCT CTAGGGCTGT  
TTGTTTCATT TCCCTCTGAA TGAATGCTGC CACACGGTCA TATGTGAGCC AAGTTTACAA GAATGGAGTT GCTGCTGAAG  
AGATCTCTCA TTCATCTCCC CCAGTGCTG TCCTTCACAA TCATAACGTT ACCCTTGCTT GACAAATATA CTGTATGGCA  
AGTCATAAAG GTCTINGAAC AGGACTTGAC CC

SEQ ID NO:1338: (Length of Sequence = 212 Nucleotides)

TAGTCCCTT TATATAATAT AATCAAGTTC CTCCATCTGG GCATTCAGTT AAATCTACA ACATTGCCAA AATCTGATTT  
GACTCTACAG AATATGTATA GTTATTTAA CCAGATAGTA ATTTAAATTT TTACAACATG CGTATTTTCAT GTAATATTAA  
TAACAGTAAT TTAAATTAAT ATTCAATACA TACCGTTTGA ATTTTATATA GG

SEQ ID NO:1339: (Length of Sequence = 280 Nucleotides)

TTTTTAGGAA TAACAAATGT TTATTCAGAA ATGGATAAGT AATACATAAT CACTCTTCAT CTCTTAATGC CCTTCCTCT  
CCTTCTGCAC AGGAGACACA GATGGGTAAC ATAGAGGCAT GGGAGTGGG GGAGGACACA GGACTAGCCC ACCACCTTCT  
CCTCCCGGTC TCCCAAGATG ACTGCTTATA GAGTGGNGGA GGCAAACAGG TCCCCTCAAT GTACCAGNTG GTCACCTATA  
GCACCAGCTC CAGATGGCCA CGTGGCTGCA GCTGTACTCA

SEQ ID NO:1340: (Length of Sequence = 324 Nucleotides)

CTGTCCACC TCAGATCATC AGGCATTAGA TTCTCATAAG GAGTGTGCAA CCTAGATCCC TCCCATGTGC TGTTCATAGC  
AGGATTTGCA CTCCTATAAG AATCTAATGC CACTGCAGAT CTGGCAGGAG GCGGAGCTGA TGGTGGGAAG GTGGTATTGC  
TCGCTCTC GCCTACTGCT CACCTCTGC TGTGGGGTCC AGTCCACC ACAGACCACT GGTCTNTGAC TCAGGGACCA  
CTACCT AACT AACANGNTG AGGAAAACAA CTGGGTTTCAT CACACAATTA TTTTAAAGTT CAGGTTTINC AAATAACTTA  
TCCA

SEQ ID NO:1341: (Length of Sequence = 376 Nucleotides)

CTAATCAAGG GTACAAGATG TCTAANTCAA AGGCCAGCT CTGCCTACAA GTCAAATATC TAGGCCTAAT CTGGCCAGA  
GGAACCAGGG CCCTCAGCAA GGAATGANTA CAGCCTATAC TGGCTTATCC TCGCCCTAAG ACATTAAAAC AGTTGTGGG  
GTTCTTGGGA ATCACTGGCT TTGCGGACT ATGNTCCCC AGATACAGCG AGATACACTC TAAGGAGACC CAGAGGGCAA  
ATACTCATCT AGTAGAATGG AGACCCAGAG GGCAAATACT CATCTAGTAG AATGGGGACC AGAGGCAGAA ACAGCCTTTC  
AAAACCTTTA AAGCAGGCCC TTCTTNCAG CTCCAGCCTT TAAGCCTTNC CACAGG

SEQ ID NO:1342: (Length of Sequence = 335 Nucleotides)

ACCTTCCCC ACTCCTGGT CCCCAGGAGC AGCTCCTTCT GCCCGANTNA CTCACAGTGC AGGGAAAGGA GGCAGGGAAA  
AGACCAGGAT TCTGTGAGTT CTGAGGTGTC CACACACAAA GAAGCTGTGG TTTCTCTGCC TCGGCCACTG ATGAGACTAA  
AACTGGCTTC CCTTGGAGA CGGCAGATTT CAGGCTGATC CCTGCTTAAG CCTCTCATC CCCACGCTGG TCCTGGTATT  
GATACAAGAC CCAGCTGTC ACMAAGCCTC CAATCCTGGG GGTCCACGGA GCCTGGGGCT GANATTTCCA GAACTATTC  
GCCAGTGGGC GCCCA

SEQ ID NO:1343: (Length of Sequence = 379 Nucleotides)

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GAACCCAGGA GGGGAGGTT GTAGTGAGCC AAGATCGTGC CATTGCACTC CAGCCTCGGC AACAGAGCG AAACCTCCATC  
 TTAAGAAAAA AAGAAGGGTG TGATAGTTAA ATTATGTCAT CAACTTGGCT AGGCAATGGT GTCCAGATAG TTGGTCAAAC  
 ATTATCTAG ATGTTTCTGT GGAGGTTATT TTTTAGATGA GATTAGCCTT GTAAACTGGT GAAAATTGGG TGAAGGAGAT  
 TACCTGTCAT AGTGTGGTGG GTCTCATTTA ATCAGCTGGA GGCTCAATA GGGAAAAAGA CTCACCCINC CCTGGAGCAA  
 GAAGGAAATT CTTGCCAGC AGAATCTCT NGGCGAGCAG AATGCAACCA TAACTCTT

SEQ ID NO:1344: (Length of Sequence = 400 Nucleotides)

GACGATGGG ATCGGGCTG TGCTCTGCAG GTCTCCCA GAGATGTTGT CATACTGCGA GGGATGCGC TCGTAGGACA  
 CCTGTCAGCC AGAGCGTCC GCCGTCTGGN AGGCTGCGCT CCTGCGCTTC TTCTGGGGA GAGCAGGTGG CGTATCTININ  
 TGCTGCCCTG GGGCCAGAGG TCCGINTGGC TGGGGATGGC CGCCAAGAGG CAGCTGGAAA GGAGGGCCAA GAAATGGAGA  
 CCCAGACTCC CCCAAGACT CTGGCAACGG GCTAAGGTTT CAGGGCCGTC TGCTGAGGTA TCTGGTCTGC GTTAGAGAGG  
 TCTTNTGGA GGAATTCATA GTCGGGATCA TAGCAGATCT TGTCCTTTT CTATACCATC TGTCCTATTT GGAGATNGCT

SEQ ID NO:1345: (Length of Sequence = 347 Nucleotides)

CCTCTCCCC CAAGGAGCTT GCAATTTTAA GAACTAATCC AGTTTGAGGG CTGAATTTAA GTTAAATCA ATTACTGCC  
 TATGTACTCC TTTTAAACA ACATTAGGTC AAGACCTTT CAGTGCTAAA TAACTGATT TGTCATTATC ATACATTCAA  
 GTTTTATAAA TGTGTTTTTC CTCACTTCAC TGAAATATCA GAATCCAGCT CAAAAACAGA ATCAAAGAGG AGACTTTTAA  
 GCTTATTCAA TAAAACTAT GGTACGGTAA TATTCAAAT AGTGAAATC ATTATATTAT CTAAATTTCT CAGGAACTG  
 CTTTAACCAT GGATTAAATA ATTTACC

SEQ ID NO:1346: (Length of Sequence = 287 Nucleotides)

CAAGTCAATA CCATAATTA AGTCAAGTTC CCAGCCTTAA TTATATTINT NTCTGCTOG TTCACTCTCT CTCTCTTCC  
 CTCTCTCCCT CTCTGCCCCA CCCCCGTGTA CATTATATAC CAATTCATIG GAGATATATA TATGINTGIN INTGINTG  
 TGTGINTNC TGTGINTG TGTGINTGTA AGAAGCAGGA TGCTTACAC AGATGTTTCA TATATTGAGG NATTACAGAG  
 TAATTACAGG GAAAGGTATT AACTGTCTT TCAACACCT AGGCAGT

SEQ ID NO:1347: (Length of Sequence = 295 Nucleotides)

ATTAAACAAC TTTTAAAC TTTTGTGCA CAGGACAGAA AACTGCTGT ACATGCTATG TCCACTTTTG GAACACAGAT  
 TTTAACAAT TATGAATGCA CAAAATCTTA CATATCATGC AACTCTATGC CAAGAACCA ACTTCTTCC ATGCAACAGA  
 TATGAAGATC TAAATGGAAA CCTAGCTAAG TCTTAAACAC TTTCCAGTA GCAAGTATAA TATATGTTGT TGAGGGAAAA  
 CCAGTCTTAA CAATNCTTG TACACAATAT TCATGTGCCA AATACAATGN CAGGN

SEQ ID NO:1348: (Length of Sequence = 332 Nucleotides)

AGTCCCTGCT ATGTGGATAT TTGGTAGCAA TGAATGATGT GGAACTACA TATGCAGATT TTATGCTTC AGGAAGAACA  
 GGTAGAAGAA ATGCAATACA TGATATCCTG GTTCTCTG CAAGTGGCAA CAGCAATGAA TTAGCCTTGA AATTAGCAGG  
 TCTTGATATC AACAGACAG AAGGTGAAGA AGATGCACAA CGAANTCTTA CAGAACAAG TGNGGAAGC CCAGGGAGAA  
 GCAGCAAAT CTGAAAGCTT AACACCCAC TTTGACCTC GGCCACACT GAAAATGTCT CAAATCTCCA GGGNGTATCT  
 GGAATGCAT TT

SEQ ID NO:1349: (Length of Sequence = 296 Nucleotides)

GCCCCAAAA CAATGACACA AAATTCATTT GGTAAATCA TGTAAGGAA AAAACAGCAA CACCACCACA CAAACAGGAA  
 AGTGGGAGTA TGATTAGGAG GGGTGAGATG AAAACTATTT TACAGTAACA TTCCACCAA AAGACTGTCC TAAGAACAG

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CTGTCAATAC AGTTCACAGG GAAAAAGCAA ATGTGGTATT TTTTGTATT TTTTAAAAGC TCCCTGGGTC CCAGGTGTTT  
TGCAGTTTTT AAGGNCCTAT CTGCTAAAGG AATGCCCTTT TAGGGTCACA GCAGGT

SEQ ID NO:1350: (Length of Sequence = 317 Nucleotides)

CTGTGCCCCA GGCTAGAATG CAATGNCGTG ATCTTGGCTC TCACTGCAAC CTCCACCTCC CAGGTTCAAG TGATTCTCCT  
GCCTCANTCT CCTAGTAGC TGGGATTACA GGTGTTACC ACCACGCCAG GCTAATTTT GTATTTTTAG TAGAGAAGGG  
GTTTCACCAT GTTGGCCAAC CTCGAACTCC CAACCTCAGG TGATCCACT GCCTCAGCCT CCCAAAGTGC TGGGATTACA  
GGCATGAGCC ACTGTGCCCTG GGCCAATAAA CTATATTTT TCAAGCCAAA GTAGGACAAG CACAGTTTTT AAAAGGG

SEQ ID NO:1351: (Length of Sequence = 349 Nucleotides)

CGGATGGGTG GGATGAGACT TCAGCTTTAT TGGAAATGTT TTATTTCCTT ATCTAAAAAA ATACTAGAAA GAAATACAAC  
AAAATGTTAA CAGTTGTTAA TGTGGCCTC TGTAATATA GATATTGTT TACTTTAGTC TTTTTTTTAA TCTCAACTAA  
ATTAAAAAG GAATTTTAGT CTTTTTTTAT CTCACTAAA TTAAAAAGG AATTTTAAAA CCTAGTGT ACATGCAAGT  
GAGTCCAATA ATGGCAAAAT AATAATGAGG NTACATAGGA AGGGTGACCT AAATTTTAAT GGGTGAATAC TGGGTCCCGG  
GTACAAGTTT GANAAATTTT GAATTTCCG

SEQ ID NO:1352: (Length of Sequence = 304 Nucleotides)

TTTTTATACT ATTTAAAGA ATCCTTAAAT GATGGGTATT CTCTAAAGCA TGCGGGGCTT AAAACCTAGA TGATGGATTG  
ATAGGTGCAG CAAACCACCG TGGCACATAT ATACCTATGT AACAAACCTG CACATTCAGC ACATGTATCC CAAGACTTAA  
AGTAAAGTA AAAATTAAAA AAGATGGGTA TTCTATATTT ATCTTTCATG TTACATTTT CTGTGTTGGG TTTCTAAATA  
AAACTGTGTA CATGAATGTT TTATCTCAT TCTGTATTTT AAAAGAAGC TGAGTAACAA AAGG

SEQ ID NO:1353: (Length of Sequence = 307 Nucleotides)

CTTAGTCTGA CATTAGGTTA TGAGAAGTAC AAAAGATCCA CAAGTACAAA AAAATCTGTA TAGCTTTGCG GTAGTTGAAA  
AAAATGCAAG AGAACAAAAA AATTTTGTGA GTAATATTCA TCTCTGCAGA TCTGAGTGAC AGTCCGCTTG AAACACCGCT  
GTAAAAGTGG TAAAAAATGA TTTCAATGTG ATTATGTTAA AATTTTGTAT GTCTCTNTTA CTGTGTTTAG GGGAACTGG  
TCTTCTGNC ATTTATACCT GGATANGTNC CTTTCCCTGT AATTTTNTCT GAAAGGCTCC AATTTCC

SEQ ID NO:1354: (Length of Sequence = 407 Nucleotides)

GTGAAGTTAA GCAGCAAGGG CTGAGAACCG CTGCTCCAGA GAGGCCAGGA GGTCTGGTCA GAGGCTGGGG CCCCAGCCCC  
CAGGCACCTC TCTGTGTCAG TTTCCCTGGA GAAGTCATGA GTTTGAAGAG TAGGCAGAGG CCAGGTGTCA TCACTGAGTC  
ACTCATCAAT GGCCAATGAG AGTNCAAAGG GTAGCTCTGA GCACAGGATG TTAGCAAGA CTCTGGGTT CAGCTCCAG  
TCCCACCANT GCCAAGTGGG GGATCCTTAG CAAGGTACTT ACCTTTTNN TGCTCTGTT TCTACGGCTG CAAAATGGGC  
ACAATAATGT CAGATTCATG AGGGATAATG AGGACTAAAA TTAGGNTAAT TNCCTATAAG CTGCTTCTAA ACGTATTTAC  
TTATAAA

SEQ ID NO:1355: (Length of Sequence = 355 Nucleotides)

ATTACTATTT GCCTCTATAG GAGGTTTCAT TAGGCATCTN CTTCAATTATG AGTCAATAT AATCAAACAC TTATCAGTAC  
AAGGCAGAGA GACCGGGACT AGCTGCTAC ACATCTCAA TGAGCTTTAG GAAATGTGAA GGAACATGG ACTGAAATC  
TTCTGGTGGC AGGTACTCTC ATGTGTTGTC CTATCTGATG CTCTCAACAA CCTCTAGGGG TAGATATTGT GACCTCATC

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TTGCAGAAGC CTTGGCTCAA GTATATGCTC AGAATCACAG AGCTGGAAGA TAAACTTGGG TCTCTCTAGT GCCAGAGNCC  
ATGNCCTCTG ATCTCTCAAG GGCAGAGGTA TTACC

SEQ ID NO:1356: (Length of Sequence = 406 Nucleotides)

TTTTTTTTAG TTATTTTCACT CTCTCTGTTA AATTTATCTG ATAGGATTCT GCAGAGAACA AAATTCACA GGGCCCTGTG  
GAGCAAGGAG CCCCTTTTCC CTATCTCCTT CCTCTAAGAG CTACACCCAG ACCAGCTGGT TATCAGCGGA GGCCCGCTG  
CTCCTCATGA GAACGCTGGT GGAAGACGAA GGTGATGGCA GTGGAGGCAG CATCCCAGGC AGCCTGGAGT ACCTCATCCC  
GGAGCCCCCA CTTATCAGTG CAGTGGTTCC ACCCTGCCAG GGTCTNAAGT GCAGTCAGAA CCATCAGGGG GTNGCCGGAT  
CTGACGGCTG TTNACACAAC GTGGCAGTG CAAACCTAGG GACAGAAGGC ACANCINAAG TCACTNCAGA TCCCATCTTC  
CTACTG

SEQ ID NO:1357: (Length of Sequence = 231 Nucleotides)

TTTCACAAAG AATTTATGAT TGCTTCACCA GGTCACTAGT GAGCTAAAGT CAAGGAATGA CTACAATCTT GTAGCATTTT  
AAAGTGATTA GAATTTGAGA AACTTTTACT ACATTATGTG TTAATATCAT AAGAACAATC CTTGGGGGC ATTGAATAA  
TAAAAAGNC TACATTCTTT GCACCANGTG NTCATTTTCA CCCACATTC AGTATTTTNC TCTAACTTGG G

SEQ ID NO:1358: (Length of Sequence = 302 Nucleotides)

CACAACTAAT TTGTAAGCCC CTTGAGCGCA GGAAGTGGTT TTTTAAAGAA TGATGTATTC TTCACAGTGC TTTCCCTTTC  
TGTTACCCAG GGAGCACATG GCAATATAAG GGCTCCTGGG ATTGANCTTT AAGTACAGAG AAAACCTAAG AATNCTTTTA  
GATAGACAGA TAAGAGACCA CNAGAGAAGA GCAGATTCTA AGGTATNIGT GAGAAACGTT ATGTAATGAA AAGATAATTG  
ATGACACACA CTTCCAGAGN GTGCTGGCGA GATTTGATTG AAAAGCACAC GGCTAGGGCA CT

SEQ ID NO:1359: (Length of Sequence = 356 Nucleotides)

TAATGATGAG CCTCTGGGTG CAGGGAGAGG ATAGGACTTG ATGCTTTCCA GGGGAAATAT TTAAATTTTC AGTACTAAGT  
TAAGTCTGTA TCATTTTACT TTTTATATAG TTCTCTATTT TATGTGTAT GAGATGAAA GCTTGCACAT AAAAGATGAT  
AAGAAATTAG AATTCATCGT TTCTGTGTGA CCAAGAAGAA CCTTAGTGAT CTCTAAAAGA ATGTGTGTA AAATATGGAT  
TCINCITTC TTCTAGTACT CCCCTAGCAT GACANTGAGC GTGTGATCCA TTACCAAGTC TCCTCATGAA AACCACAGTG  
AGTCAGCCCT TCACAGAACT ACTACGGGAG GAAATT

SEQ ID NO:1360: (Length of Sequence = 366 Nucleotides)

AAAATTTAAT TCAACTGACC CATCCACCG GGAATGCCA CTAGGAAGGT GTAGCCTGCA GTTTTACCTA ATAAGCACAA  
CTGGAGGGGA ATAGAAACAC AGAATTGTGA GGAATCGCA AGGCATGCTG CTCAGAGCAT GCTAGCCCT GCACTGAAAG  
CTATGAGATA CTGGTTCTGA GGCATGGCTG TGCTTGCTGG TGGGAGCGGG CATCTCCCT TGGCCTCCCT GGGACACCTC  
CTGTGCTCCC TGCACTGCAC TCCAAGTGCC TGGGGTGTCT ACACAACING CTGCAGCTTC ACTAAAGAAC AGGTGGCACT  
NCAGCTTCTC CGGGTCTGC TGAGCACAGG GNCCGCCAN CCTTGA

SEQ ID NO:1361: (Length of Sequence = 347 Nucleotides)

CCTCTACTG TCTGTCTGT GGGACAGTTG CCTCCCCCTC ATCTCCAGTG ACTCAGCCTA CACAAGGGAG GACCAACAGG  
NCTAGTTTT TCACGTGAT GGAGTTCCAA GCTTTTTTTT TTGATTGTG TTGTTTCGCA AAATAAAAC AATACACATT  
CCAAGAGAAA TGAATGATC TMTGACAG TCTCTTTTC TCATTTACA ATGTACACAC GNCCTTCAG TCGCTGCTCT  
TGACACGGCC CNGTGTGGAC GGGTCAGGCC CGAGGCCCT CGGGAGCAGA CCTGTAGCTC TCTGGGGGAT CAGGGCTTCC  
ATTAGGGAGA AAGTATTAGC AGTTTCT

SEQ ID NO:1362: (Length of Sequence = 358 Nucleotides)

CCATTCATT CATTTCAT CAATATTCAT TCAACAAATG AAGCAAAGGA GCACACAGCC AAGTGATGGA GCAAAATCAC  
AAATTAAAG GTAATTCAGG CCAGGTGAGG TGGCTCATGC CTGTAATCCC AGCACTTTGG GAGGCCGAGG CAGGTGGACC  
AGCTGAGGCC AGGAGTTTNA GACCAGCCTG GCCAACATGA TGCAACCCCG TTNTACTGA AAATACAAA ACAAAACAAC  
AACATAAAAA AATTAGCCAG GTATNGTTTG CAGGCGNCTG TAATINCAGC TTAGTCAGGA GGCTTTGGCA NGGGCTTCAG  
TTAGCCAAGA TCGGACCCIT NCACTTTTCAG CCTGGGTA

SEQ ID NO:1363: (Length of Sequence = 312 Nucleotides)

TATTTAAATA ACGTGCAATT TCATAAATCA GCACATTTAC TAGATAGGTA GGATACTTTT NATCCATTTG TGTGTTAAAA  
AATTAGCGCA TGTTCCTCTT TATGCCACT TGTATTAGCA GAATAGTGT TCCGATTCC CTGAATGGNT CTGTATTGAG  
TCTGTATAGA CCCCAGGA AAAGGAGGAA TTCGCCGTGC CCGAGAATAG CTCGTCAG CAGTTTANGG NAGAAATCTC  
TAAACGTTTT AAATCACATA CTGACCAACT TGTGTTGATA TTTGCTGGAA AAATTTTGAA AGNTCAAGAT AC

SEQ ID NO:1364: (Length of Sequence = 345 Nucleotides)

CTGACAGATT TACAGATGCT GACCTATTGA AAAATACCAC AGCCAGAATG GGCTAACAG GTATATAGTT AATACAACCA  
CCACATCCT TACTTTTAA CATAGCTCTT AGTAGGAATT TCATAAAANT GGACATCACA GCTAAAATGC ATTATTAATT  
CTCCTATCTG CTGACAATAA AAAAGCAGCA AACTCATGA TTTCTATTTA AATGCACTAG ATGGGAATAT CATGTTCTAG  
GGGTGTTTGC CTTCAAACCA AACCCACAGC AACACACACA AGCAATTTG GTATCCACCA TTTTAAATTC ACAATCTGAG  
NCTAAATGAA TGGCTATTTA TATTT

SEQ ID NO:1365: (Length of Sequence = 255 Nucleotides)

CTCCAGAAAG CCATTGATCT GGTGACGAAA GCCACAGAGG AGGACAAAGC CAAGANCTAC GAGGAGGCGC TCGGCTGTA  
CCAGCATCGG GTGGAGTACT TCCTCCACGC TATCAAGTAT GAGGCCACACA GCGACAAGGC CAAGGAGAGC ATTGAGCCA  
AGTGCCTGCA GTACCTAGAC CGGGCCGAGA AGCTGAAGGA TTATTTACGA AGCAAAGAGA AACACGGCAA GAAGCCAGTC  
AAAGAGAACC AGAGT

SEQ ID NO:1366: (Length of Sequence = 322 Nucleotides)

AAAAAAAAA TTCCAAGAA ACAGAGTAAT TTCTCTCTT GCCTCAGCCC TAAGTCATCT CCCAGACAAA AAAGCAATCA  
TCATTGTCAA ATTTAAAAGG GAAAAGGAAA GACTTTTATT TGANTGAAAA GATTTTTTTC AGTGTGATAG AGAGGGAAGA  
CTGAAATAAA CAGAATTAC AACCTTCGCA CCTTTCACC TTCTCTTCT AGCAGTATGG CAACTAAAT AACTTGCAT  
GAAAACGGGT TAAAAGCTG TATACTTTT TAAAAATAT ATTTGNTTA TGTCAATGAT CTGCACAGTT TTGAATACAA  
AA

SEQ ID NO:1367: (Length of Sequence = 349 Nucleotides)

GAAACAAGG TCAACATCAC TCATCATTAG AGAAATGCAA ATCAAACCA TAGTGAAATA CCATCTCACA CCAGTCAGAA  
TGGCTGCTAC TAGAAATAAC ATGCTGGTGA GGCTGCAGAG AGAAAGGAAT GTTTATACAC TGTTAATGGG AGTNTAATTA  
GTTCAACCAT TGTGGTAGAC AGTGTGAAAA TTCTCAAAG ACCTAGAGAC AGAAATACCA TTGACTGAG CAATCTCATT  
ACTGGGTATA TAGCCAAAGG AATATAAAT: GCTTACTGT AGAGAAAACA TGCATGCATG TTGTTTGA GCACTATTTC  
ACAGAGCAA ACACATGGGA TCAACTTAA

SEQ ID NO:1368: (Length of Sequence = 379 Nucleotides)

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CTGGGACAGA GACCTTTGCA TTGCTCCATG TGTGGGCTTC AGCTGGGACA GAGACCTTTG CATTGCTCCA TGTGTTGGGG  
 CAGGTCTTCC ATTTCATCT CCTCTGCCCT AATTATTAG CCATACTTGT GCTATTTATT ACTTTTAAAC CCTAATCCTT  
 TTTCGGTAAT TTGTTACAT TTTCAGAGT GCCAGCATT TACAATGTGT CTTTTATGTC TCACAGAGGT CATCATTAAG  
 TTAGACCTTT GGCCTCATGT GTCTCCCGAG AGATGGTTTA TAAATTTGC ATNCTTCTGG CACAGGTGGT GTGGCTTAGG  
 GATTAGGACA CAGCCTGCCCT GAGTTCACAC CTCATCTCTC CCACTTAACA CTGATAATT

SEQ ID NO:1369: (Length of Sequence = 319 Nucleotides)

ATTTCTGGTC TAAGTTTTAT TATTCTTTT CTCTGCTTG TTTTAGGCTG ATATTGCACT TCTTACTCCA GTTTTCTAAG  
 GTGGAAGCTT CGACTATTGA TTCAAATCT TTTTNCCTTN CTAATCTATG CATTCAATGT TATAAGTTTC TGTAAGCAG  
 TGATTTTATT GCATCCACA TTTTGATAGG TTATATTTCC ATTTAGTTAC AAATAATTTA AATTTCCCTT GAGATTTCTG  
 CTTTGACTTA TGTTTATTT GGAAGTGTAT TTTTATCTC CAAATATTTA GAGATTGCA GCTGTCTTTA TGTATTAA

SEQ ID NO:1370: (Length of Sequence = 343 Nucleotides)

GGAAACATA AATNTGACA AGTAGTTCAA GACTGTTGGG ATAACTTAG CTAGAGTGCA GGTCAATACT ACCCATCTTT  
 ATAAGGAAGC TGAAAAGGGA AGTATGAGGA CAGGAGAAC AATGACTTIN TCTCTCAAGC TTGACTTAAA CCACCAGGAA  
 AGTTCTTAAA GCCAAAGCCT TTCTCAGACT CTCACCAAC CATAAGAGTC AGAAAAATGG TCGTTTTCAA AGGAGTAGAA  
 AATTCGTAC AAAGTAAACA ACAGCTGAAG CAGGAAAGN ACATACATTT NNTCACTTAG TGGCAGCAG GCAAAACAGA  
 ACATAGGCC AGCTTGGTAA TTT

SEQ ID NO:1371: (Length of Sequence = 295 Nucleotides)

ATTTCTNCCT GGGCGCGAT GATCTGAGCA ATGCCCCCA CAACTTGGT TTTCACTACA ACATCGTGT CATCAGCTTT  
 GCCAAAAGCT GCCTTCTGGG CTGCACGGAC AAGATTGINT GAGGCTCTTT TCACAGCAIT TCCTGCCGCC TGTAGCCGCC  
 TCATGGCCTC TNAATCCTGG TCGGCCTTCA CCTTGCAGGC CACCAGCAGC TGAGCCGTGG AAGCGCGAC CTGCTTGGCA  
 GATGAGATGA GCTTCTCTC GCTGGCGTGT CCTGAACGG AGGCATTGGC CGCCT

SEQ ID NO:1372: (Length of Sequence = 340 Nucleotides)

TTTGCTTTCA GATAATGTTT CTGTAATCTT TATAAATGCT ATCTGTGGTA TCTCTGTAT AATTNACAAT GTTTGCATGT  
 AAAAAACAAA ACCCATAGAC CTTAAAAAA AGAAAAAAG AATATACAC TATACATAGG CACAGCTTAT GCCAGAGCA  
 TAGCAGGTGC ATAAACACT GTTGCTATAA ATGCAAGAAA AAGGTCAATT AACCACAATC ACATTTTTTT NCATAAGNGN  
 GTCTGAAATC TATACAATAT ATACATCTAT GTTCAATGT GGAAATAATA TTCTTTTAAA TTTCAAGGCG TGTATACCC  
 CTGAGGCCT GCATAAATGG

SEQ ID NO:1373: (Length of Sequence = 315 Nucleotides)

AATCCTGGGG GTGATTTAGA ACTTAGAGGC ATTCTCAAAA TGGACCAAGC TAAATGGTAG CCTTTATTIN CTGTAATGAT  
 TCACCATGGG AAAATTAGTA ATTCTTTAAA CTCTTACTT AATCTTATAT GTATTCCAAA TTINCTAAAA AGAAATTAAC  
 CTAGAGGTTT TACAGAACTC CATTTTTTTT TTATTINCCA GAAAGGAAAA ATTTATCTGT NCTGTNATTT TGTAAAAAT  
 CCTATTCCAG CTACTACTAT GGAAAAAGGA AAAGAAGAAA GGAGGAAAGG AAGGGAGAGA GGAAAGGAAG GGACG

SEQ ID NO:1374: (Length of Sequence = 327 Nucleotides)

GAGCCAGTGG TGGCCCCAA CAGCCCAATC TGGTACTCAG TCAGCCTAT CAGCAGAGAG CAGATGGGAC AAATGCTGAC  
 GCGGATCCTG GTGATAAGAG AAATTCAGGA GGCCATCGCA GTGGCCAATG CAAGCACTAT GCACTGAGAT GCCTTGGCCA



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AAAGGAAAAT ATAAAAGAAA ATAAATCTC ACATTGGTGC TTAGCAGGAG AATTTTAA GACTTACAAA TCAACAAGCT  
GTTCAAATAA ATAATGAATG CTGCAGCTGG CTCTTACATG GGGCTTTNAG TGTCCCAATA GTAGCAGATG TCCCAGTTCT  
ATAAAAT

SEQ ID NO:1375: (Length of Sequence = 338 Nucleotides)

TGCATGGAAA CTTAATCTAT TCAGGTCCCA ACTTTCAGGC TTCTCTGCTC TGACAAGTAC TAGAGGCCAA TATGATAGAC  
TAGTCTGAGT TGGATGCAAG TTAGCCATTT CCAGGAATGA TACCAGGATA AGTATAATGG TCGTGAATAT AACCGGATTT  
TAAGGGAGAA TGATTACACC TGGAAACAAA CTGTCAATAC ACAAGTAACT AGTTGTTAAA GATTTCTAAT TTTGACCAAA  
GATTTTACT TTCTGGTAT AGAAATGGAA ATAAACATTN ACACTTTAGG TTTTGAAAGC AACCACCTCC TAACACGGTT  
CTGAGTTGGG GGCCAACA

SEQ ID NO:1376: (Length of Sequence = 307 Nucleotides)

CAAGCCTCCC TCAAAAAAAT CCCAGAGTA ATGAAATAC AAAGTCTGCT TGTCAAAT TATGGTGC GA ATAAAAAGG  
AAAGGGAGGA AGTGATGGAG TAAAGTTCAG ATTAAAAATA AACGGAAAGT CACAACAGTC GAAAGGTGGA AAAAAACCGC  
AAATGCCCAT GANCTGATGA ATGGATAAAC AAAATTGGT GTGTGTGTAT ATATGTGTAC AAACCTCCTT TTTATGATGA  
AATAGTATTT CATGTGTGT GCACATGTTN CACACACANT TTAAATAGTA TTTCGTCATA AAAAAAG

SEQ ID NO:1377: (Length of Sequence = 353 Nucleotides)

TGGAATACAC TTGTGAATAC AGTGTGTAGG ATACATTAAC AGTTTCTGA GTGGGCTGCT CTTTTTCCT CAATACTGTA  
TATATTTNN TTAAGCTCTT CTTTAAAAGA TAAATATTT TCATACCTT CTTAAATCCT CAAGGATTAA CTCTGAGTCA  
CCATTGTGG TATTTTAAAT CCTTTTAAAT AAATCTCTGT ATTTGCACT GCATCAAAAC AGTAAACAT TTCACAGGT  
AGGATCTGAT GACCATTTTA TAATCAACAT TTTTAGGTAC CACAAGAG ACTTTATGAG CATCCACTGA AATTATGGGC  
ATTATGTCAT ATAAATATCC AAAAAATCCAT TTT

SEQ ID NO:1378: (Length of Sequence = 315 Nucleotides)

GATTTGGCAA ATATTGGGT GAGATTGAA AATAAATTAC ACCACTG TG CACAAGTTAA TGTGAATCAA GCATCTGTTT  
ATTTCAITCA GTTATGCCT TTTTCTTT TTTTGTGAG TGCAGTTGGG GTCACAGACT CTCAATTTGA CAAGACACTT  
TAAAGCAGG AGTAGAAAT AGGCTGGGT TTTACAATA TTACAGGAAC TGTCAATAA AACTTCAAGT GGATCAGTTT  
ATTTCTGATT TAACTTGGG ATAAACAGTG TTCAATATTT TCCAAAAGAT TCTCCCATTA TAGAAGTCCC AAAAG

SEQ ID NO:1379: (Length of Sequence = 352 Nucleotides)

ACCGCAAAAT TTAGCTGTT ATTAGGTGC AAGTCTCTCC TTCTCTCCCT GCTTCTCTT TCTNCTTTT CTCCCCACAA  
ATCCTCTCAA AACACATACA AAAAGAGAAA ACTAGAAGCA AGATTGGGTC AAACATGAAG AACACAGAAA GCTATTAA  
TAGCTAGCTT TAAAGGGCTC TTTTTCAGTT TGAACAAAAG TAAAACGTTT TCAAAAGCAA AAACAGAAAA CAGAGCTTCC  
ACCCAGATTG TGCAACTTAA TGAGAGGAGG TTAGTGTGA TAAACCCATT GTGAAATCTA TTATAAAGTG ACAGGTTTTT  
CAAGCAAGGA AATCCAATCC AGTTGGGGT TG

SEQ ID NO:1380: (Length of Sequence = 261 Nucleotides)

AAAAATTAAG TCAAGACGTG AATAGATATT NCTGCAAGA AAACATACAA GTGGTCAATA GGTATATTA AGGTATTCAA  
TATCACTAAT CATCAGGGAA ATGCAATCA AAACCACAAT GAGTTATCTN CTCATACCTT TNATGATGGC TAATATTAA  
CGAGAGATAA CAAGTGTTTA TGGGGGTGTG GNGAAAAGAG AATGTTGGA CACTCTTGGT TGAAATATAA GTTGGTAGAA  
CCATTATGCA AAACAGTATG A

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SEQ ID NO:1381: (Length of Sequence = 273 Nucleotides)

GCCACTACAC TCCAGCCTGG GACACAGAGC AAGACTCCCT CCCAAAAAAA AAAAAAAAAA TTATTAGAAA GAGGAAGAGA  
 GAGATGNCAA AGCCTTTTAC AGTTGGGTGT TGGNGTTAG AGACCCAGTA CCCCAGCCTG ACATACCTAC AGAAGCAGTG  
 AATTTACTTA TTTACTGTTA TGAAAAAAT AGATGCTGCC AGCCGTGCAC AGCAGAACT ACTATTGANT CATATGGTTT  
 TAGCCTTCAC CTTTAAATAT GTCTAATTAT ATG

SEQ ID NO:1382: (Length of Sequence = 296 Nucleotides)

CTCCACAGCT GCCACATAGA ACAAGCAAAT CTGACATCAC AGCTCTTTTA AAAATCTCCC AGAATTCTAC ACTGGAATAA  
 AGATCACCCA GTAAACTCAG CTATGTTGAT TCGTAGGAAT TTCTCCTTGG AGTTAATAAT AATCATTAGA AAAAAAATAC  
 AGGAAGAAAT AACITCCTCC TATCTTATT GTGATAAAT GTAACAATAG CAGACATTCG TATATAGATC CTATAAGCGA  
 CAAGAGGGAA AATAGGATTT GCAANTTAAG CATCTGGAAT AAATATTTTA GGAAAA

SEQ ID NO:1383: (Length of Sequence = 293 Nucleotides)

CCAAGGACCG GCGCGTGGG CTGCTCTGGG ACCGCTTCGT GCGGGGCTGC CGCGCCGACT GGTACGGAGG CAATNACCGC  
 TCGGTCACTCT GCTCTGACCA CTTTNCCTCA GCCTGTTTIN ACCTCTCTTC GGTATCCAG AAGAACCTGC GCTTCTCCCA  
 GCGNCTGAGG CTGGTGGCAG GCGCGGTGCC CACCCTGCAN CNGGTGCCG CCCCAGCACC TAAGAGGGGA GAGGAGGGAG  
 ACCAAGCAGG NCGCCTGGAC ACGAGAGGAG AGCTTCAGGC AGCCAGGNAT TCT

SEQ ID NO:1384: (Length of Sequence = 378 Nucleotides)

GGTGGTTTTG ACATGTAGAA AATAAGATGG AAGGCTGAAC TAGGCGCATG GTGTTGGCAA ATAATCAGAT TTCAGGAATA  
 TCACAAAGTG AGGNGCCAG GATTCATGAC CATTTTATG TAGGAATAAG GGAGGAGCCT AGGATGACTC CCCCAGTTT  
 CTGGCTCGAG TAACTGGGAT ATCAACAAGT CATTTAGCAA AATAGAGAAA ATAGGAGAAG CAGCAATTTG AGATAGAGAT  
 AGAGGCAATA TAAAGNNTTA TATATTGACC ATGTAAATC ACCTAAATTC AGAAAGTTGT AGAAAACCTG GGTCTGGANC  
 TCAGGAAAGA CACTGGATAT GTAGATTGG AAAGTTATCA ATCTCAAAGT GATTGCTT

SEQ ID NO:1385: (Length of Sequence = 204 Nucleotides)

TCATCTTGG GTGTTTCTG CAGAGGAGG NTTTGGCAGG GTCATAGGAC AATAGTGGAG GGAAGGTCAG CAGACAAACA  
 AGTGAACAAA GGTCTCTGGT TTTCTAGGC AGAGGACCCC GAGGCCTTCC GCAGTGTTG TTTCCCTGGG TACTTINAGAT  
 TAGGGAGTGG TGATGACTCT TAACGAGCAT GCTGCCTTCA AGCA

SEQ ID NO:1386: (Length of Sequence = 238 Nucleotides)

CCCCATCATG GGCAGCCAGA GCTCCAAGGC TCCCGGGGC GACGTGACCG CCGAGGAGGC AGCAGGCGCT TCCCCCGCA  
 AGGCCAACGG CATGGAGAAT GGCCACGTGA AAAGCAATGG AGACTTATCC CCCAAGGGTG AAGGGGAGTC GCCCCCTGTN  
 AACGGAACAN ATGAGGCAGC CCGGGCCACT GCGATGCCA TOGAGCCAGC ACCCCCTAGC CAGGGTGCTG AGGCCAAG

SEQ ID NO:1387: (Length of Sequence = 295 Nucleotides)

TTTTTTTTT TTTTTTTTT TTTTANTTAG GCAAGAAGAG GTGTGAGTAA TTGAGGAAAA ACTGACAGAT GCTTTTCTTA  
 ATACCAAAT TGAGCTTACA ATTAGGAAT GAGTATGTGT AACAGGNTAC AGGTGACAGT GAAGATAGAA GAACCACGNT  
 GACCACAGAC TCAATGTGCT CTGTAACATC GCACAGTTTA CCCAGCATGA CTTTCCCTAG GAGGCCCCCT CCTCACGCTA  
 GAGTAAGAT CCCAGTTAG TGAAGCTTAC CAGAAGACT AGTATAGAA GTTTT

SEQ ID NO:1388: (Length of Sequence = 201 Nucleotides)

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GCTAGTNATC TCTCAGACAC TTGGTCGGTA GAAAAGATCC CGCACCATCC TCCAGGNTCC AATGGCCTTG GAGAGAGGGC  
 TGCAGGGCCC ACGGNCATTG CTGACTCTTT AGAACGTGCT GACATGGAGC CAGACCACTC GGCCCTGAGT GCGCGGAGGA  
 CCTNTTTINT GGATGTGGAG GAGCGGGGC CGGAGCAITG T

SEQ ID NO:1389: (Length of Sequence = 399 Nucleotides)

GGTGCCCTGT TATCTGGTAA AAGAGCCACT TATGACCTCA GGTGCTACTT AACCTGGGGG GCAATTGTTT CTTAGGCCTA  
 GCAGATGTTT GGGATGACAC TAAAACTCA GTGGTGAGAT GATTCCCTTA GCAAGATTGC TGAAGTTAGG TTTAGACGTG  
 GGAGGGTGGG TATGTGAGCA ATGGTGCCAA TAGCGGCTCT TTATTTCCTT TGTCCTCATT ACTGCCATCA GGAAGGTGCT  
 ACTGGCCTCG AGCCAGGGTG TTCATAATCT GGCTTGGGT TAACCAGACA AATAGAACTT CTTTCTCTAG ACTGTTGGCT  
 TTNTGGAGGT TGGCAGCCTC TATCACAGGN TAAATTTCC CAAATCCATT TACCCAGTAT ATTCACTACA ATTTTTTCC

SEQ ID NO:1390: (Length of Sequence = 381 Nucleotides)

GGATTGAGGT GAAGATACAA CAAAGAAAGG AAATTGAACG GAATTATTAA GAGGGTCAAG TTTGATAGGC AGATAAGACT  
 AGGTATCAGC AAGACATTTT AAACAAAAGG AACATTATGT AATTTTTTAA AAAAATACAT GAAAATAATA TTTAANCAAG  
 GAAGGAATAT GATAAAGAN GGATAGTTAG TAAATTTGG ATAACATAAA GATTATTGAA TCTCCAGTCG TCAAATTTAT  
 CCTAAACTAC TGGGGAGAGG TCTCATGTCA GATTTTGATT ATCAGAGAAAG AGGGGTCAAG AGTATAAGNG AAATTCCTTT  
 TTGTTTGAAT CTTCCAGTGT CCCNCTATTG TGGCAAATA TCAAATTCAT ACCAAATATA C

SEQ ID NO:1391: (Length of Sequence = 327 Nucleotides)

GAAGAAGTCC TTCCTAAGCA AGGCTTACAG ACTCCAGGG AGAACAAAT CTCTTTATCT CTCTGGGGTT TTAGGACCTT  
 CATCAAGTCA TAGAATTGAA ATAGAGAAC TCAATTGTC AACTTTTTAA TTTTAATAGT TTTTGTAGTA CATAAAATC  
 ATGTATGAA TTATTTTGTG GTTTTAATTA TAACTTTTTT AGCACTTTTA CCATATTCTT AAAAATTAATA AATTATGAGT  
 NCTGAGAAAG CAGTGAAATC ACATATAGGT ATTTGATTAA CTTTTATGTG ATCTTTTACC TCAAGCTAAT GTTCTTTAAA  
 ATCAAGG

SEQ ID NO:1392: (Length of Sequence = 223 Nucleotides)

TTTTTTAATA TTTAAACAA TTTTATTCAT GAAAATATGC TGTACAATGC ACTCTACACA GCCTCGACAC GGCACACAG  
 CACACGCACA CTCTGACGGC ACGGCCACGG TACACTGCCT ACGATACGG CCGGGGACGC CGCGCCACC GCCCGTCCCG  
 GCCGGACACT TATAAATATG GGAGAAGGGC CAGAAGTNGC GCGGAGAAAG GGGCGTCGGG GTT

SEQ ID NO:1393: (Length of Sequence = 296 Nucleotides)

GAAAGTTTAT TATTTCCCAA TGINCTTAC ATTTNCATTT GGAAATATCA TTCTGACAG AAATAGNTAC ATTATACCTT  
 CGAAAGCAGA AAGATCTTAA TTAATTAAAA CAGTTTACAT TTACCTTAGC ATTAGGTCTG GCTGGCTAAT TTCAAAGGAT  
 TAAAAATTGC ACCNATTTGG GCCAACTGGG GTCTGAATA ATTATCCNGG GTAAAAGTAT AATATTTTAT ACTTTATACA  
 TTTTGCTTCA TCACACATTT ACTTTCCACA CAGTNTCAA CTTCAATTT AAAAAG

SEQ ID NO:1394: (Length of Sequence = 281 Nucleotides)

ATCTTTCAT CCTGGGACG ATTTCCAGTT GAGCATGGTG AATAATCTTT TTGATAGGCT GTTGGAITTG AGTTGCTAGT  
 ATTTNTTGG GGCATTTTGC ATCTGINTC ATCAGGGATA GTGGCCATCA GCTTCTTTT CGTGIGTGTG TGTCCCTGTC  
 TTGTTCTGT ATTCGGGTAA TATTGGCCTT GTAAATGAA TTTGAGGAA TTCTTTCTT TTTTATTTT TGGGATAT  
 TTAAGAAGAA TTAGTATTAG TTCTNCTTA AATGTTTGT A

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SEQ ID NO:1395: (Length of Sequence = 323 Nucleotides)

CTTTTTTTAA GATTTCAAAC TGGGTACAC ACTGGAAAAG GCTGGGTAA GGGCGAAAT TTAATAAATC TGTACTGATA  
 ACTAAAGGCT ACAGAGATTT CATATATTTT TTTTAACTTT TAGAAATCAG AGTGCTTATA AAATGGCTGG CTCATGGCTC  
 TGTACCCAG CATCTCTGAC GCGGCTCCT AGCCTTCGTT GGTGAGATAA CCNGGNATAG TGATTCCATG CGTAAACAAC  
 AAGAATACTA AACCAATAAA ACTAGCTTAT CATGCAAATA TTANGGCATC TAGAAAGTCA GTTAAATATA TATTGTCATA  
 GAG

SEQ ID NO:1396: (Length of Sequence = 384 Nucleotides)

TGCTCCCGG GTTCATGCGA TTCNCCGCC TCAGTCTCTT GAGTAGCTGG GATTACAGGC ATGCACCACC ATGCTTAATT  
 TTGTACTGA TGCCAGCACT TTCTTAGCAA CCCAGCTGG TGTCTAGTA TGCCCCCTCC AGTCCACTGT CTCTGGGCCC  
 AGTTCAGCGC TAGGACTTGC TTAAGAGTTT CAGTCTTGT AGCCTATACT GCCTTTNACG TTTATTTAGA GATCTAGAGC  
 ACTTTAACC TCAGTGGCAA GGTGTGTTGG AACTTGAGTT CGGACCCTG GGATTGGCAA ATTCCTCTCT GGGCTAGGGT  
 TGCTTTAAAT GCTCCCTTCA CGTGTGGCA ATCAGCTGAG TTTGGTCCAG TTTTCTTTT TGCT

SEQ ID NO:1397: (Length of Sequence = 370 Nucleotides)

TTGAGTTTNT TCAGTGGCAT CCCCTGCTCC CCTGAGCACA CACAGTGTTC TCTATTTATG ACTGTAGTGC CAAGCAGAAT  
 TTCCATGTC TTGCTAGCTG CCCATTCTCA CCCCTCAGGG TCTCATACTT CTCCCTGGAA GCTCCCAAG CAGTCAATGT  
 GACAGGGACC AAGTATGTAC AAGGCAACAT ATTGGGTTCA AGTGCAACT AAGGGAACCA GGGCCTGTTT TTCTAGTTTG  
 GAAGTTTTTC TTTATCTTAA GAAAAGAGAC AGACCAAAC CAAGAAGATC AACATAACT CTCTCTTTG TCATCAGGT  
 GATGACATCA AGGTACTGAT ATTAACCAGA AGTTACAACA AGAAGGAATT

SEQ ID NO:1398: (Length of Sequence = 307 Nucleotides)

ATCAGCATTA GGTTTTCACC AAGTGATAC AAGTCTGAAG GTCCTCATCA GCAGTCTCCC TCATAGTCAG CGCCATACCG  
 AAGAGGCTG TCCCTCTCAT AGGGCCTTCC AGCCACTNCT TCCCCACAGG CCTGATTCTN CTGTGGCTGG GAGTGTGGAC  
 TGATTTGTTA TGATGTGAGA GATCCNNGG GGTGTGAGCT ACCGCACCTG GCTGAACTTT CAAGGAGAAG TTGTGTGATC  
 ANTTTTCAA AAATTATGAT ATCAAAAGAT AGCTGTGCC TACATTTGGG AAAGATACAA AACTTG

SEQ ID NO:1399: (Length of Sequence = 380 Nucleotides)

CTGAATTATT GAGGATGAAT TGATAAGAC AGGTGTAATG AACTGAGGCC GGGCATTAGA CTGAGCAGCT GACTGTCCCT  
 CAGAAACCAT AACCTTGCTA CCGCATTTGG GCATTGTGAC AACTGTTGAC ATCAATGCAG ACTGCAAGTN AGTTGGCAAA  
 GCTGCTGATG TGTTAGCTGA AGTTGTGATG GGATTGGAAG TGACAAATAC AGTTATTTGA TTTGGGGCA AGGGAGTNGA  
 AATGGAGGAA GAGCTAACAG GTCTTGACAT TACTGGAGGG ATGCTTGGTG CAACGTTAGA ACTGACCTCA CTCAATTGGG  
 GGATGCACAA GGGATGAACA CAGCTCATTT CCTGTNAGGT AAGTTTAGGG AATTAGAAGG

SEQ ID NO:1400: (Length of Sequence = 232 Nucleotides)

ATTATAGATA CACACCACCA CACCGGCTC CTCACATTAA AGTGGNNTA TGACCATGAA CACTTGTAT TAATAAATGT  
 CTCAGCACAC CCAAGCCTGA AAATCTGATC TAAACCTCCT TAACTTGAAT TCCATCCACA ATCCACAAT TNCCTGGNAA  
 AAATNINTCC CAGCTTCTCC TTCTCTAGC CCAAGAAACA GCCTTAACAG CGNGOGATTT CATTCCTACA CT

SEQ ID NO:1401: (Length of Sequence = 349 Nucleotides)

AAGCTAAATT TATAATGAAC AGATTGAAGA AAAATAAGA GCTACAGAAA GTTCAGGATA TCAAAGAAGT CAAGCAAAC  
 ATCCATCTTA TCCGAGCCCC TCTGTCAGGC AAAGGGAAC AGTTGGAAGA GAAATGGTA CAGCAGTAC AAGAGGATGT

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GGACATGGAA GATGCTCCTT AAAAATCTCT GTAACCATTT CTTTATGTA CATTGAAAA TGCCCNITGG NTAAGTGGAA  
 CTGCTAAATT ATTTTATTTT TTACATAAGG TCACCTAAAT GTAAAGCGGT TAAAAGACAT CTTTNCINGC ATTGCCATCT  
 TAATATC AGATATTACG GGATGTTAG

SEQ ID NO:1402: (Length of Sequence = 338 Nucleotides)

GTAATTGCTA TTTGATGTTA TTTTAAGAAA TTAACCCCTA AAACCTTTAAT TCCTTAAAC AATCTCAAAC AGAAGAAGCA  
 AAAGCTTGTT CTGTGCTCCA GGAAATAAGA TTCAGCACCA ATGAAAATAA ATTATAGAAA ATCAGAAGAT GGGTCAATAT  
 GAGTGGAAAA AACCTAACAT TTTAATTGTT TTINCTCTCA ATAATTGTTG TGAACCATCC AAAAAAGTAT GATACAAAAA  
 TAGCACTATA CTAAGAGCCA GATGACATGT CCTTAAAGCC TTAGCTCTGC AAATTATTGG TTGTGTAACA CTAGGNNACA  
 ACACTTAGNC TCTCCTAG

SEQ ID NO:1403: (Length of Sequence = 381 Nucleotides)

GGAGTCTCAC TTGTGTGCC AGGCTAGAGT GCGANGCGT GATCTTNGCT CACCACAACC TCCATCTCCT GGGTTCAAGC  
 GATTCTCCTG CCTCAGCCTC CTGAGCAGGT GGGGTACAG GTGCCGCCA CCGCACCCAG CCACTTTINT GTTCTCAGCA  
 GAGACGGGC TTGCCCATGT TGGTCAGGCT GGTCTCGAAC TGACCTCAAG TGATTGTGCC ACCTTGGCCA CCCAAAGTGC  
 TGGGATTATA GCGTGAGCA CTTCACCTG GCCTCTAAGC TTAATCATTT CTAGGCTTTT NATTTAAAGT GAGAAACATG  
 TGACTCTTTC CTTTCATTG GGACACTTTA AAAGGGGTTA TTAAATTGAC CCTAATTACA A

SEQ ID NO:1404: (Length of Sequence = 325 Nucleotides)

AGCTCATCAG CTATCATTTG TGTTAGTGTA TTINATGTAT GGCCCAAGAC AATTCINCTT TTCCAGTGT GGGCCAGGGA  
 AGCCAAAAGA TTGATACCC CTGACAGGAT TCCAGGATTC TTTTGTAAT NCTCAGAGGC CCTCTGTGCA TACTCCGTAA  
 GGACTATCCA CATTCTTTAT TACTTTCAIT GGCAATAGGT ATAAATTTT ATTTGTTGNN TATTTTACTG NAATGTTACT  
 TGTTTTTGCT TATTTACTGA TTGGGTGGGA GGAAGTCAA GGATGAATAA ATCTAACNT TTTTAAAAAG GAAAGGCTAA  
 AAATA

SEQ ID NO:1405: (Length of Sequence = 349 Nucleotides)

GGATTATGAC TGAACGTCCT CAGCATGTTG GCCTTACCC CTGGCGGTGG CTGGAACACA AAGATGCGGC CCGCAGGAG  
 CAGATTCACA GGCACCTTGG GGTGATCTC CATGGTTAGG AAGAGTCGGA AGCAGGCATG CGGCTGCAGG GAATGCAACT  
 TCTTCTCCAG CTGCATCAGC CACCTGGGG CCAGATGCAC ATTCTTCAGC ATCACCACC TGCCGANIT TACAAGCGGT  
 GTTTTATGTC CTTATCTGCT TNGTTAAGC CTTCTTCAGA GCGATTGCA ATTGAAGGGA TCTTCGGGGT TCTNCTCGGC  
 TNCAAAGGTC CTGACAATG TTCCCTTG

SEQ ID NO:1406: (Length of Sequence = 392 Nucleotides)

GGACTGCCC GTTGTTTATG AGACAGGTC TCATCTGTC ACTCAGGCTG GAGTGCAGTG TCATGATCAT GGCTCACTGC  
 AGCCTCGACC TCTCAGGCTC AAGTATCCT TGCACTCAA CCTCAGAGT AGCTACGACT ACAGGTATGC CCCACTATGC  
 CTGGATAATT GTNCTTTTT TTTTGTGGT AGAAACAGG TCTCATCTG TTGCCCAGGC TAGTCTCAA CTGCTGGACT  
 CAAGTGATCC TTCCAACCTG GCCTCCCAA GTGCTGGGAT TACAGATGTG AGTCACAATG NCCAGCATGG ATTGTCTTT  
 TCAGACCCAG ACCAAAGAAC AGGACTTATT TGTCCCAAGA CCAATCTAGG NAAAGTATAA GCTGTGTGT CA

SEQ ID NO:1407: (Length of Sequence = 362 Nucleotides)

GTTAATTGGG NTTCAACAGC AATAATTTCT CCACAACAAA AACCACAACT TGAAGNGAGT TGAAAAGNGN TCAATAGTGG  
 AAACAGTGC CTGACTCTT TTNCTTCTG GNTTTCATCT CTAGAAATTT NAAGTGTTN AGNCAGAGTC CACCTTTGT

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GCAAGGCGNG AACGATGAA TGGACTCCTT GTGTGAATTA TTGCATCTTC TTCCAAAGCA GGTTCATCAA GACTTTCACA  
GAGATTCAAT TTINTTGAGA AGTAAGGGTT AATAGGAGGA TAGAATTGG TTCCNAATCT AGTGNIAAAA GTGTCCAAGC  
AAATCAAAAA GTAAGATATT TTAGGGGCCA TACCCACATC TT

SEQ ID NO:1408: (Length of Sequence = 388 Nucleotides)

CCCCGAGCA CCACGAGCTG ACCTGCTCT TOGAGTGTCC GGTCTGCTTT GACTATGTCC TGCTCCTAT TCTGCAGTGC  
CAGGCCGGGC ACCTGGTGTG TAACCAATGC CGCCAGAAGT TGAGCTGCTG CCGACGTGC AGGGGCGCCC TGACGCCAG  
CATCAGGAAC CTGGCTATGG AGAAGGTGGC CTGGCAGTC CTGTTTCCCT GTAAGTATGC CACCACGGGC TGTTCCTGA  
CCTGCACCA TACGAGAAA CCAGAATG AAGACATATG TNAATACCGT CCTACTCCT GNCATGTCC TGGTGCTTTC  
CTGCAAGTGG CAGGGGTCCC TGGGAAGCTT TGATTGTCCC ATNINAATGG AACGGCCAC AAAGAGCA

SEQ ID NO:1409: (Length of Sequence = 348 Nucleotides)

CAATGAATC CTAAGCTTT GTTAATATGA GAATGCTTT ATCTCTCTT TATTTCAAA GGACAGCTTT GCTGGTTAAA  
ATATCTTGG TTAAGTTTG TTTTAGTAC TTAGCATATA TCATTCCACT CTCTCTGGC CTGTAAAGCC TCTGTGAAA  
GATCCACTTC TAGCCTTATT GAACTCCCT TCTATGTTAT TCGNTCINC CTCTGTCTG TTCCAACATC CTGTCTTGT  
CCATAATTG TAACAGATTG AATATAATAT GAATTAGNCC TCTTTAGACT GAATCTCATT GGAGNCTTT CACCTTCTT  
GTTTTGGGT ATTTATNCT TTTCACAG

SEQ ID NO:1410: (Length of Sequence = 370 Nucleotides)

GACTATTTAT TCTGCCTTAA ATCAATGGCA AATAAGTCAA GATGACATTT TGTGAATGTA GACTATGGAT ACACTCCTAA  
TAGATTGATG TAGTCATAAA AGGGGGTCAA GTAGATGTTT TNCIGTATG TAAGCAATAA TTTCCCGTG TCTTATTGAG  
TATGGCTAGC GATTATTTAT TACATGCTAG ATGGTTCTT TGCAATGTTG TTCCATATAG GTGCAGAAAT TTCTCAGCC  
ACTGGAGGGA TTTGACCAT ATTTGTCAAT TGGATGAGCT GTTATTAGAT TGAAATCTAC ACATCATTTT ATTAATAATT  
GTGCCCTAGA AAACGCAAAG CTNITGCACA ATGGCGATTA AAATTATGGG

SEQ ID NO:1411: (Length of Sequence = 385 Nucleotides)

GTCTCAAACCT CCGACCTCA GCGATCCAC CCACCTCAGC GTCCCAAAGT GCTGGGATTA TAGGGGTGAG CACCGCACCT  
GGCCTATGAG TGGTCTTTTA ATTAGGAAAT TTACATTTT ACATTAGTGA GATTGGTCTT TTGGGCTATT GTACTTTTTT  
TTTTTTTTT TTGAGATGGA GTCTTGCTCT CTCACCCAGG CTGGAGTGCA GTAGTGCAAT CTGGGCCAC TGCAACCTCT  
GCCTCCGGG CTGAGTGAT TCTCTGCCTC AGCCTTCCAA GTAGCTGGGA CTACAGGCAT NTGCCACGC ACCTGGGGTA  
ATTTNGTGG TTTTAGTAG AGAATGGGG TTTTGCTAAT GTTGGCCAG GCTTGGGCTT GAAAT

SEQ ID NO:1412: (Length of Sequence = 337 Nucleotides)

CCATTCAGAT TCCTCTGGG CCTCTCGCC CCATTGCGA CAGATTGCT ACCTGCTCCA GCTCAGGAC CCTTCCCTCT  
ATGATGAAGT GCATTGAAGA GAACAATGT GTGGACAAGA GGATCAGCAG GTTTATTCTC CCCATGGGG CCACCGTGAA  
CATGGACGGA GCAGCCATCT TCAGTGTGT GCGCGGGTG TTCATTGCGC AACTCAACAA CGTAGAGCTC AACGCAGGAC  
AGATTTTAC CATCTAGTG ACTGCCACAG CGTCCAGTGT TGGAGCAGCA GCGTNCAN CTNGAGGGGT CCTCANCATT  
GCCATTATCC TGGGAGG

SEQ ID NO:1413: (Length of Sequence = 357 Nucleotides)

ATAAGTGGAG TGAAGAAATT AATGCATAGT TCAAGCCTAA ACAATACAAG CATCTCAGC TTTGGAGTCA AACTGAAAA  
TGAAGATCAC CTGGCCAAGG AGCTGGAAGA CCTGAACRAA TGGGTCTTA ACATCTTAA TGTGGCTGGA TATTCTACA

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ATAGACCCCT AACATGCATC ATGTATGCTA TATTCCAGGA AAGAGACCTC CTAAAGACAT TCAGAATCTC ATCTGACACA  
TTTATAACCT ACATGATGAC TTTAGAAGGC CATTACCATT CTGACGTGGC ATATCACAAC AGCCTGCACG CTGCTNATGT  
AGNCCAGTCG ACCCATGTTT TCCTTTCTAC ANCAGCATTA GACGGTG

SEQ ID NO:1414: (Length of Sequence = 360 Nucleotides)

GTATACAGCG TGGTCCAGCC ACCCGACAGC GAGATGGGCA TTTTAAGAAA CGCTCTCGGC CAGATCTCCG AACCAGAGCC  
AGAAGGAATC TNTACAAAA ACAGGAGTCA GAACAAGCAG GGGTTGCTAA GGATGCAAAA TCTGTGGCCT CAGATGTTCC  
CCTCTACAAG GATGGGGAGG CTAAGACTGA CCCAGCAGGG CTGAGCAGTC CCCATCTNCC AGGNACATCC TCTGCAGCAC  
CCGACCTGGA GGGTCCCGAA TTTCCAGTTG AGTCINTGGC TTCTCGGATC CAGGCTNAGC CAGACAACTT GGGACGTGCC  
TCTGCATCTT CAGACAGAAT TNCTAGCCTG CCTNAGGAAA

SEQ ID NO:1415: (Length of Sequence = 314 Nucleotides)

CTCAAACACA GCATTGAAG TCTTAATATT TTAGTACATA CTATACTATC TCTNCTTACA ATTGTTTTTT GTTAAAGAAA  
CCATGTTTTT NATCTAAAG AGTTTCCTTT ACTGTGGATT TTAGTGATTG CATCTTTGTT GATGGGTAA GATTGTCCNN  
ATATAGCAT TAGTNCCTTC AATGTGCTGT ATTGAGTCTT GCCTCTGGGC TCCTAAACTG TGGAGGGCTG TTTGTCCCTA  
TAAATAATGG GGACAGATTG TCCTGCTTTT TAATTTTCAA TGCCGTACTT TTACCCNCTA ACTTTTCCGT AGAT

SEQ ID NO:1416: (Length of Sequence = 370 Nucleotides)

TTCCATTTTT GTCCTTCTC AGGATAATAG CAGACCGGTG ATCACAACCT TAGTTTTGAT GAGATAACCT CCTTATCT  
TAAAAATGGT CTCATTATT TTCCAAGAGA AGACCAGTAA ACACTAAACA CCTGCCTTGA TCTCAGTGTC TTAGATGTTT  
TCCTGTTTCT CCTTTATCCT AGCAAACCTC CCAGGTGCTT ATTCTTATTC CCATTTTATA GATGGGCAAC TGGGTAAGAG  
AGGTAAGCTT GGTGAGGTCA CTGAGATAGT GGGGAAAGGA GCTTGGTTCA CATCAGGTAT GCATTCCTCC AAGGTTCAC  
TGGGGCATCT GAAGGAAGGG GTTCTTGGA GTGCAAATA TAGGGTACTG

SEQ ID NO:1417: (Length of Sequence = 365 Nucleotides)

GACTCCTTCG CCAAGGGAGC CATCAGCACC AGTTGTTCCT GAGCAGCCAC AACACCAGTG ACCTCCCTTC TGCTTCGGC  
CAATCCCGAC AGAGCCTCTT CCGAGTCTT GAGCTCCTGG ATAGCTGCCT CAATAAGCA GGACTCGGGA GTGTGCTTCT  
CCTCTGCCAG CTGCTGCTCT AGTGTACTT TCTCCTCCAG AACTACCGG TGCAGCACTT GCTCCTTAGA GGCCAGCAGC  
AACTTGGAGT ACTGGCTGTG CTGTTCATCT CCTAGATGAA TGGGATGGTC TACATTTCATC CATTTGGGAT TTTGGGCAAA  
AGCCACCAAC AACCCCTTTT TTTCCCTCTT CAATCAAGCT GCAAT

SEQ ID NO:1418: (Length of Sequence = 354 Nucleotides)

CCAAATCCTT AAGTTTACAA AGCTGTGGA AAACTTGTG TCCTGATTTT AACAAATCAG CTTTGTTTGA AAGATGAGCC  
AAGCTCACAG AACTAAATTT TTATGTCATG CCATAAGCTG GAGAGGAGCC ATTTGGCTAC AGCTGCGGAA CTTTATTGAG  
GAGCAAAATGA AAGGCACATG GACGAGCAG CTGGTGCACT TCATGTTCTT CCTGCCTGTG AATTGAATAC TGTCTGTGTA  
GCAGTTTGG GTCCGTCCAG AGCTCAAGGC TGGTTTGTG GCCTGACTAC GGATGAGCAC TGAAGTTGCC TCAAAGAATT  
AAGGGGTGTC CACANCAGCC TCTTGGGGTC TTTT

SEQ ID NO:1419: (Length of Sequence = 363 Nucleotides)

GTGGAAAACG TCGAAATGAT GTGGCCACTG AAAGAAATTC AAGACAATCT AAACAATCTC AGTTTCCAT TTTCACTCTG  
TGTTTTCTTA TGAACAATAA CATTCAGAA GGGGAAATAT CAGAAAGTTG ATTGATTTTT AACCCAAAA TAGAACTTTT  
TGTAAGCTAG GAAAGCATCT AAAATTAACA AGAATACAAA AATGCACTTT TGTTTACATT TGCTCTATTT AGATCTTACA

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AGAGATTATG TCTTGAATCT ATCCTGACTT CAGCAAAGA CAAAAGAACG TTGAAAACAT CCTATTTCCA AATCGTTTAC  
AGGAAGTTAC CTAAGGAGNC TGACAGATTC AACGGCTGCT ACC

SEQ ID NO:1420: (Length of Sequence = 326 Nucleotides)

GAAGATTTTC TAGAAGCAAA TAGTGCCACC ATCCGTCATG AGGNTCTGTT TCTATAACGC TTGINTGTCT TINAGACTAC  
GTAGGTGGTA GCTTATGAGT AGTAATGINC TTTTGTAGT AAATGTCACC AAATAAGCAA ATAAGAGAAA CATGAAGGCC  
AAAACTGIN TTACTATTCA GGAGAAAATG GACGGTTTAG CAACAATACA ATGTAGACTT CAAAATATGA AAAATCAAGG  
AAATINCTGT CATGTCTTT AAGGGCCTCC AGAGAAGTAT TAATTGTCC TTATGTGAA TTAATGAGA TCATGTGAAA  
TGTATG

SEQ ID NO:1421: (Length of Sequence = 294 Nucleotides)

ACCCAGTACA GGTACTCTCA CAGGAGGCAC TCAGCAGGGA TGTAGTGACA GCAGGTAAGA NTCCACCTCT NTCCCTGCCT  
GCNCCTGGGA TCCAGTATG GCCCATGTAT CINCOCATT TCCTCAGGCT TCCTGGACTT TTNTGGAGG GAAAGAGGAA  
CAGAAAGAGG AGCAGGCAGG AGAAGCAAGA GCTCCCGGG GCTATGAAAG GTAACATACC TGGAGAGTTT NGGGAGACGG  
CGGCTTGINA GAGACAAGG GAAGAGACAG AACAGGAGT ATTCTAAGAA GCAT

SEQ ID NO:1422: (Length of Sequence = 306 Nucleotides)

GAAGGGCATA TTTAATAGCT GCTGCAAACA TATGGAATAG TGCTTTAATC AGTGGTGAAC AAGAAATGC CTGTTGTGG  
TTATAAAAC AAGGGACATT AATGINCTG TTCTGTACC ATAGTAATGT GNAAAAAAA ATAGTGGTGT NAAATGGTGT  
TAATTTGTAC AGTTTGTGTC AAAGTAGAAT GGCNCAGATA TTTTGGTGA TAGGCTTTTG TCTTAGTTAT AAAAATTAGG  
NCATTTGGTA TGATAAAGC NGAGAATCTT AACAAATGGG CACTGGCCCA GAAATTNCA GGGTGC

SEQ ID NO:1423: (Length of Sequence = 274 Nucleotides)

TGTGTGTGTG TGTGTGTGTG TGTGTGAGAA ATGGGGAAAG ACTGGTCTAG ATAATATTTT AGGTACCTTC CAACACTAAA  
ATGGTATGAT TCCAGCTTA CAAAAGCAA ACTATTTTAA TATTCACCAC TCAATATAGT GTATCAAGCT CTGGTTTAT  
GTTAAGGC TTAGGNACA GCAGCACTA TTCTGGGCA ATTAATNCAA AAATCATGT TACCAAAAAG GCATGTTTAG  
GNCCTGCAGG ATAGTGAAAA AGCAAGAACA GTCT

SEQ ID NO:1424: (Length of Sequence = 297 Nucleotides)

GGAGGATTAC TTGAGCCCG AAAAAAAAAA AAGCCTCAGG GGTTCGGTG AATGTTGTGT GGAATCCGT GAGAACAGAC  
GTTTGATGTG AACTGANITC AAGGCTGATA CAGCCAGAA CCAGGNACAA GGTGAGAAAC TGCTGTTTC CGGGAGGCAG  
GACTTCCTAA CCGGAGGCA CTGCAGTACA CTTTCTGAAA CAGGTTTGA GGATAGGGA ATTCCTGACA GCCCGGGGG  
ATCCACTAG TTTCTAGNA GCGGCGCCA CCGGGTGA AGGCTCAGC TTTTGT

SEQ ID NO:1425: (Length of Sequence = 276 Nucleotides)

ATTTTTTCAA GGATGGAAG GTCAGAGAAA AATAAAATA AACATCTTC AATAGTCTTT CTTGGTAAAA GCAGGCTCTC  
TNTGGGCTGG GGAGTAAAG GTGTGGGCA AGGGGAGTGG GGAGAGGCTG TAAACCTTC CCCAAACCC AGTTTTAGAT  
CCTTTGGTTT CTTCTCCA GAAGATGNC AGAAGGCAT NGTGGNAAC AGCAGGNGG AAAATATGGT GATGACAAAC  
CCCAGATGAT CAAGGGGCTG ATGCTCCTGG GGCCA

SEQ ID NO:1426: (Length of Sequence = 295 Nucleotides)



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TAGTGGCATA TGGACCGGAA AGGGTTAATT TAAAGGGGGG GAACCTCAAA AGTTTTTTTA AAAAAGAAAC TTGTCTGCCA  
 CAGTATGTGA CCAGTGTAA CCCTCTGCC AGTTAGCAA CTTTGCCTT AAGCCTTTT CTCTAGGAT ACTCCCCATG  
 TTTCGGTAAT CTGGGCATA CATTTTTTAA GNATGGACCT CTTTGCCTTG TTTTGTTC ATGCTGCTGT ATGTCCAAGT  
 ATTGTTAATT TCATAATAAG ACAAGAGTTG CTTTCTTTT TAATTCCTTT TTCCC

SEQ ID NO:1427: (Length of Sequence = 207 Nucleotides)

TCAGGAATGA TAGTATCTGG GATGAACCTCT TCTTTAATAA GATTGAGGCC AGTNTGGTG GGTGNTGCG GATGATTGTT  
 ACTGGNCAG CCCAGCATC ACCAACAGTT CTGGGAATTT CTCGGGCAG CTCTAGGGTG CCAGGTTTAT GAAAGTTAT  
 GGCCAACTG AGTGCCACAG CTGGATGTA CCTTNCACCA CTCCTGG

SEQ ID NO:1428: (Length of Sequence = 223 Nucleotides)

TAACATCTC TCCAACCTCC CCAGTCCCA TCAGTGTGA GAAGGAATCT AGGCCAGCTC CTGGGAGATG CCAGTTAAGC  
 CGCTTTGAAT CCGTGCCTT TCCAATTGNC CCTTATAGCA GTCGATGCA GGGATTGGGA CAACTTTCAA AACAAGTCCA  
 TCAAGTCCC CATGGGCACT AGGGGCTCTG GGAACCCAGT GTCGAGAGGC TTAGAGNCAT TGC

SEQ ID NO:1429: (Length of Sequence = 222 Nucleotides)

AAAACCAAGG AGCAAAGGG AGACAGAGAG AAAAGTGGGA TGGATTCAA GACATTGCA CATAGAACTN ACCGAAGTGG  
 CTGTGNTGAG GTAAGGGNG CAGGATGACT CACAGTTTC TGGGATTATG TGCAACAGGT GGAAGGTGAT GCCATTAGCC  
 AGAATAAGGC TGTAGGCTNA AGGGGAGTNA AACTGGTTCT GGGGTATAA CATTGATAGG CC

SEQ ID NO:1430: (Length of Sequence = 246 Nucleotides)

CAAAATTTCC TGTATCCTT CATGGGTTIN CTTTGTGTTG TTTTGGTAAG AACATTTAAC ATGAGATGTA TCTTTNAGTT  
 GTTGTGTGG TTGANTTTT TTAGATACAT AGTCTCACTC TGTACCCAG GACTGGAGTG CCAGTGGACA TGATCCACAG  
 CTCCTGACA GGCCTCAAAC TCCTGGGACC CAAATGAATC CCTCCACCT NCAGCCCTCC CAAGTAGGCT AGGGACTACA  
 GATGTG

SEQ ID NO:1431: (Length of Sequence = 364 Nucleotides)

CTTNCCTC GATGATGCTT CTATAATTT GCCCTTAAC AGAACTTTC AAAAGGGAAG AGTTTTGTG AATGGGGGAG  
 AGGGTGAAG AGTTCAGGC CCACTCCTTC CTGCATGTT TACAGTCATT GGAATAAGG CATGGCTCAA ATCGGCCACA  
 GGNCGGTGA CTTGTGCC CAGGGTTTG CCCCCAAGTG CCTCCATTTA AAAGCATTAA GGCCGTTACG GCATCTTCAA  
 AACAGAGGC TGCATTGCA GGAACCCCT GCTGCTTAG TCCGATAGG GTATTTGAAC CCGCNTATA TTTAAGGCA  
 TTTTAAATC TCTTCCCCC ATTTTATTGA CTTTGAACAA TTAA

SEQ ID NO:1432: (Length of Sequence = 208 Nucleotides)

GTGAGTNAAC ATGGATGGAA ACAATATT AGGTGGINCA AAGTGAAAA CACCAAAAT AAGATTTAAA AAGAATGTCA  
 GGTATCCATA GAAAAATATT AATAGGTCTA ATACATATGT AAAANTTGGC GTCCAGGGG GNAGAGACTG NAAAGTTATA  
 TTTTNAATGG CTGAAATCCC CCAANTTTA ACATAAAGCA CAACATT

SEQ ID NO:1433: (Length of Sequence = 274 Nucleotides)

GGAAGGTTT TAATGCATGA AGTATACTTG TGATCTGGA GGTGGAAAA GATTAGTAA AGATAAAGTT TGGCAAAAT  
 GATTCTNCC CTAGGATTTG GGGATATGTA AATCAAACCA AAGGCACATT CTGCAGCTCA CAGCAACCTT CATTTTTGT

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CCTAGATTGA GTTATCTATC AAGAATCATT CATTCCCTCT CAGCCCTTGC AACTGTTTCC NATGACTTTG GACTTGGCCA  
TGCAACTTGC TTGGCCAAT ACAATGTGAG TTAA

SEQ ID NO:1434: (Length of Sequence = 249 Nucleotides)

GCTCCATAGG TCTAAGTTTG ANCTTTTCTA GAAAAGGATT TGCAGGACGA TCTGACGAAT CTGGGGCTTC CAAATTAGTT  
CCAACAGTTC TAGTATTTTT TTTTTTTTTT TTTTGACAGA AGCAAATAAG TAAGTTTAC TTTGTGATTA AAACAAAAGT  
GAAATGCATT TAGTCCAGG AAATGCAAT CCTTCTGCA TCTNACTTTT TTTTGCTGTG ACCTCGAGNT TCTCTGTCC  
TCTTCAGTT

SEQ ID NO:1435: (Length of Sequence = 201 Nucleotides)

GAATGGGGCC AATGGCACTC ACTGINTCTT CAGGCCCCCA CGGAGGCGAT GCCTGGGGAA GCCTAGTCTA CTTACCATCA  
GCACGTGAT CTNTCACA GCATGGAGCC ATAGTTTACA AAGGACCAG GCAGGTCAAG GACAGGCCAC TAAACTTTTT  
GGTGTGGGC ACATNACCA CCTCACCAN CATCAAAGAC A

SEQ ID NO:1436: (Length of Sequence = 312 Nucleotides)

GGGAAAGGTA TATTAACCTT CTGCATCAA GATGTAACAG TCATGGGGTC TTGGTGGCCA TCTGGTCTGA GTTAGGTACA  
GGACAAGAAA GAGTCAATTA ATCTATAATA AAGATCAATG ATTGAAAGAA GGGAGATCTG GTCTCTGTCT CTCCTAGTCA  
TTTACAGAAC AAGAGCAATG AGGAAGACCG TTATGCTATA ATCTAAGNAA CAGAATTGGA AATATGCTAC TGACTCAGTC  
TCCAGGGGCT TAACTTCCCC CTGGGCATAA TAAATTTAAG GAGTCTTAA ATTTTATTTT CCCTTACATT GG

SEQ ID NO:1437: (Length of Sequence = 294 Nucleotides)

ATTCCAATGG TAATACTAAC GAATTGTGCT ATCTAAATAT TGGATAGTAA AAACGTCAAC ATTTAGAAAA TGTATATCAC  
ACAGGGAACC AATATTTTNC AAATTATCCA CATCTAATAT TAGGCAACCA CGCGCAANAA AAGACAGTT CAAAGTACAG  
GAGAAATGGA TGGATTTTAA TGTGAGATAG TACAAGANGT TTATGTATAT AGTTTCAAGA TTCCATATTG TAATAAACCT  
TTAANGAAAC TTTCACTTCT TGAGTTTGG GTATAGGAAT CCAAAAAAAA AAAA

SEQ ID NO:1438: (Length of Sequence = 311 Nucleotides)

GGCCCTTTGA CTTTGTGAAT GAGCACAATG AAATGCCGCC TACTGATGCT TCTNATGATC AGAACTCTTT TTTAATAAAA  
TAAATAACAT AAATCGTTGA ACATAATGTT CCGTTTGAAT GCAANCAAA AAAAATATGG NAAACATTTT GNTAAATTT  
TTTCNGNTA AAACCATGAA CANTGGCTAT GATGAAGGTT ATTACATATG GAAAAAAAC TCACACAAGC ATATTGNTAT  
TTGGCTTGAA GGAACCCAT CATTAAATGC AANGCTAGG ATTCTTTTNG AAGCAGTTGA TCCTCAGGTT T

SEQ ID NO:1439: (Length of Sequence = 265 Nucleotides)

CGTGACACAG TTGAAGGAGT CGCTTAAAGA AGTCCAGCTG GAGAGAGATC AATATGCTGA ACAAATAAAA GGAGAGAGGG  
CCAGTGGCA GCAGAGGATG AGGAAATNT CGCAGGAGGT TTGCACATTG AAGGAGGAGA AGAAGCATGA TACGCATCGG  
GTAGAGGAGC TNGAGAGGAG CTNTCCAGA CTCAAAAACC AGATGGCTNA GCCACTGCCC CCGGATGCCC CAGCAGTNTC  
CTCTGAGGTG GAGCTNCAAG ACCTT

SEQ ID NO:1440: (Length of Sequence = 241 Nucleotides)

GTITACTCT TGTGAAGATA GCCTTTAAT CCTAATENG CATGTAAGT GTGACAGATC CTAATCAGT TTTAATAATT  
GAAGCAGATA GTAATACTA GATTATGAC ATTTTNGT CATGTGTCA GCTATTGCTT CAAACTGCT CAAATTATAC

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TTGGNATTTT ATAGTGTTTT ATTTATTATA TACTCTNCTT GTAATAANNT GGTAATCTAG TTTCCAGAAT CATGCAAATA  
G

SEQ ID NO:1441: (Length of Sequence = 247 Nucleotides)

GACCCCGATA TTCCGGCATC ACATAGATAT CCTCCAGATA AANGGTGCGT CCCTTCCATG TACTGTAGAT GAAATAGTAT  
ATCCCATAGC CCACCACGCA GGGCCCCAGT AGCTTCCCGG GCGCTGGAAG AATCTCTGCT ACCAAACAGT GATAGAAAGG  
ATTGTNTCCA AAGCCATCTG CTCTCAGGGC TTCTTCACTG ATAGGNGTTT TTTTCAAGNA ATAATCCATG CTAAGAATGG  
GGTATTT

SEQ ID NO:1442: (Length of Sequence = 233 Nucleotides)

GATTACAGCC AAGTTCATGA ATACAAATAA AATAGCAATT TCCCTCATTC TCTCTTTTGT TTTCTGNTCA GAGAAATCAG  
GAGATGGGAG CATTATGCTC AGAAACCGAA GAGCTCTTCC AAGAGCTCCA GCTTAGAGTC CAGGCTTCCA GAGCATGCAG  
CCTCCTAACA CGTATGTGGT CACATGTGCA AAGACCTNTA TTACAAAATA TTCAGAGCAG NATTTCTNTT AGG

SEQ ID NO:1443: (Length of Sequence = 288 Nucleotides)

AATAAACAAT GTGCAGGTTT TTATAACTGA TCGGAAGAAG GTTGACCCNC AGTTATCACC TTTAAAAAT GGTCTTAGTT  
AGGCTTTCTC CCTTTGTCTT TTTCCAGAAG AAACCTGGAG TCTGTCAAAT TTCACAAAAT ACCCTGTGTA GATTTTCTCT  
GGCTTTGATA AGGGTGAATT CACAGATTAA TTCCGAAAAG AATTTCAGGC TTTCTAATCA AATTGTTCCT TCCAGGGGNT  
TTTGCTGNTA TTAGGNCCT TCTAAAGGTT AACCTAACT TTGATTAT

SEQ ID NO:1444: (Length of Sequence = 208 Nucleotides)

GGAAGTGAAT CACAGGGCCA AAGCCCCCTT TNCCTCACGT GAAGCAACTC AGTAAGATGG CGGTGCAGTG AAGCCTATTC  
CCACACACCT CGGCACATGAT GGAGCAGTCT CCAAAGGAAG GCTGAAAGGA CAGCAGGTGG TTGCCTTNGG GTCCCTCCTT  
CCCATANCCT TAGAGTGCCA TTTTTCAGCA ATGGGTAATA GCATCAAC

SEQ ID NO:1445: (Length of Sequence = 239 Nucleotides)

CCCCGGTCTC TNGGACACCA TTTTCTGCCG CTGGACGCAA GGGTTGTGT TTAGAGAATC AGAGGGATCT GCATTAGAAC  
AGTTTGAAGG TGGCCCTGT NCTGTTATTG CACCTGTCNA GGCAATTTCTT TTGAAGAAGC TCCTGTTTTT TCCGAGAAG  
TCTTCTINGC GGGATTTTTC AGAGGANGAG CAGAAGGNAC TCCTTTGTCA TACCTTGTGT GATATTTTAG AAAGTGCTT

SEQ ID NO:1446: (Length of Sequence = 243 Nucleotides)

TGCAGGGAAT TINTTGATGC AAAACCAGGA AACAATTTAT CTCCACTGGG AATACTTTGA AGAAGGGATT AGAGCGGGC  
TAGGGCAGGG AGGATCINTA AAAACAATA TTTGCCAAAC TAAAAACACA TAGGCACACA TGGGNATTAT TTTACTTTCA  
ACAAGTTCTG AAAGTAGTAA CAAAACCAGG GAGAGTTAA AGAATAATTT AACACTNATG NITCAGGAAT GCTAAAGGAG  
ACC

SEQ ID NO:1447: (Length of Sequence = 371 Nucleotides)

AGTTATAAAT GAACATCTGT TGCCTACTTA ATAGGTCAIT GAGTAGCTGT GACCCATTCT TAATTTGTAT GTAAGCATAT  
TTTTACATA TTTGTATCTA CTTCAATTTT CCTTGAAGCT TGCCAAATTG GTACACTTCA GTTGAACCTG ATGCTCTTA  
TATGCTGTAC CACCTTCITA AAAATTGAAT TATCTTCTCT TCCACTAGA TTGTTCTCAA AGCAATTTGT TTTGCTGGAC  
TTTCCACTCT TGACCATAAG ATGGTAGCAT TCCCTAAGGA TATTGCAGCA CAGTCTAATT CCACTGGTTG TCATCTACAG  
TTAAATCGCA AATAAAAAAT AATAATAAGC AGCAACTGAT TGCTCAAGTT G

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SEQ ID NO:1448: (Length of Sequence = 366 Nucleotides)

AATTTTGTGT CCTGTAGGAA ATGCTTCCTT GGGTGTGTGT ATTATAGCCC AATCCAAGTC ATCCCTGAGA ACATCCCCAG  
 GTTGTAAAGGA TTAGTCAGAA GTCATGATGA CTGTCCTATA TAAATATTTG GCCTATTAAC TAAAATTAGT ACCTTNCAT  
 TTCTCNCCTT TCTTGGGCGG GGCAGCGGGG GAGTGCAGGG GAGGGGAAAT AGGGAACGTN CAATTGINTT TTAAGTAATG  
 CTCATAAAAT TCTTAGNCAA AGATGATCTT GCCCTCCACC TTGGTGACCC ACOGCATACG GGGTACATCT ATCTGGCCTG  
 TCTCTAGGCC TAGACAGAAG GAACAGGGAG GGTATTGTIT AACTTT

SEQ ID NO:1449: (Length of Sequence = 234 Nucleotides)

GTTGTGGGAG GGACCCGGTG GGAGGTAACT GAATCATAGG AGCAGTTTCC CCCATGCAGC TGTCGNGATA GTNAGTTTCT  
 CATGAGATCT GCTGGTTTTA TAAGCTTCTA GTGTTTCCCC TGCTGGCACT CATTCTCTCT CCTGCCACCC TGTGAAGAGG  
 TGCCCTCTGC CATGATTGTA AGTTTCTGA GGCTTNCCTA GCCATGCAA ACTGTGAGTC AATTAAACCT CTTT

SEQ ID NO:1450: (Length of Sequence = 220 Nucleotides)

GCTTTTNCCT TCCCTGTTTT GTTTGTAACT CTAAAGGAAGC AGAGCCTCTG AGACCACACA CAGCAGCGTC GCCCGTCCCC  
 AGAGGCACCC CGGCCAGGAC GGCAGGAGA GGAGACCCCT GTTCTGTCAT GCNCTGTGCG CCCGCCACGG TGNTCTCCGC  
 AGGGTGAGGC AGGAGGGTGG GTGGAGGCGC CACTGNTCCT CAGCTGGAAG GGCGGGGCAT

SEQ ID NO:1451: (Length of Sequence = 403 Nucleotides)

COGCTGTTC CCTACGGCCT GATTAACTT GCCTTCCTGT CCTCCAAGAC CAGATGATGA TTATTCTCCA CGTCTAAGA  
 GACCAAAGGC CAATGAGCTA CGCAGCCAC CAGTCCCGGA ACCCGCCAAT GCTGGGAAGC GGAAAGTGAG GGAGTTCAAC  
 TTCGAGAAAT GGAATGCTCG CATCACTGAT CTACGTAAAC AAGTTGAAGA ATTGTTTGAA AGGAAATATG CTCAGCCAT  
 AAAAGCCAAA GGTCCGGTGA CGATCCCGTA CCTCTTTTC TAGTCTCATG TTGAAGATCT TTATGTAGAA GGACTTCTG  
 AAGGAATTCC TTTTAGAAGG CCATCTACTT ACGGAATTCC TCGNCTGGAG AGGATATTAC TTGCAAGGG AAAGGATTG  
 TTT

SEQ ID NO:1452: (Length of Sequence = 353 Nucleotides)

TGCTTAGAGA GGGGCGGGA TTTAGAGAGC TGTCTTCTG CCTATCTGAT CGCCTCTCA GACACTGATC TATTAGTCTA  
 GTGCTGCAAT TACTTGGATT GTAATGTTTC CTGCAATTT TTGCTTTTCA AATTCTTTTC ACCCTAACT GTAAATAGC  
 CAGGAGTAGG TAAAACTTA CAGGTAAACA TTGCCAAGAN ATAAGGATTT TNATGCTTC TGCTCAGTGG CATAACTCAA  
 ATCACATGAG ATAGATTTCT TTGCATCTGT CCATTGTATT TCTCTGAGGC TAATTACAG CACTTTGTCA CGTTAGGNAT  
 TTTTFTTCCC CAGTGTCTCT ACTCTCCAAC TGG

SEQ ID NO:1453: (Length of Sequence = 258 Nucleotides)

GTGCCCCIN CTGCTTTCT GTNACCCAGA GAAAGCTTCA CAAGCATGCC TGNAATTNAG TTGCACCATT TTATTACAGC  
 TGAAAGANTT GANTGTAAAG AAGGAAGTTT AATAGANCAT ATAATNCAGC AGATTATTG ATGGGGAGGT ATCTATTGTA  
 GTTTGGCCAG TGAAGGCAGG TCATAGAGGA AAATTTAGGT AAGTCGGATT TNCCTTAAAA AGAGGCCCAA GAGTTAGTAC  
 CTCAGGATTT TGTTTTCT

SEQ ID NO:1454: (Length of Sequence = 328 Nucleotides)

GAGATGGAGT CTGCTCTGT CGCCAGGCT GGGGTGCAGT GGCGGATCT CTGCTCACTG CAAGCCCCGC CTCCAGGTT  
 CAGGCCATTC TCCTGCCTCA GCCTCCGAG TAGCTGGGAC TACAGGCGCC TGGCACCAG NCCAGCTAAT TTTTGTATT

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TTTGGTGGAG ACGGGGTTTC ACCGTGTTAG CCAGGATGGT CTCGATCTCC CGACCTCATG ACCTGCCCGC CTCGGNCTCC  
CAAATTGCTG GGATTACAGG CGINACAACC GCGCCCGGCC GGTAGCAATA GTTTTAATTA AGGTCTTAAA ATCATACAAA  
AAGGAATT

SEQ ID NO:1455: (Length of Sequence = 342 Nucleotides)

AATTTAGGTA GATTAGCATT CCCATGTAAC TTACCAGAAT CAGAATGAGA ATTGAGAAGT CACCTGANIT GGCCGGGGCAT  
GGTGGCTCAC ACCTGTAATC CCAGCACCTT GGGAGGCCAA GGCAGGCAGA TCATCTGAGG TCAGGAGTTC GAGACCAGCC  
TGGCCAACAT AGTGAAATCC CGCCCCTACT AAAAATACAA AAAATTAGCC AGGCACCCCTG TCCACAGCCC CCACACAGAC  
TCGAGGGGCC CCCATCTCCT GTTCTGAACC CAACAGGGTG GTCCCACTNT GGGACCACAA ACCAGGTATG ACTGTTTINAG  
AAGCAGGCTC ACTACCAGN TA

SEQ ID NO:1456: (Length of Sequence = 296 Nucleotides)

ATCTTTGACC TATTAGGTGA ACAAATGAAC CTCACAGGAC ACACAGTATT TTTTAAAGGC AGACTCGCTC TCTTTTTTGC  
CAGTNAGCAG TTCTAGCTAA CCAAGTTACA CACTGTGGGT ATTCTGCTT GCCTCTTGAA TACAAAGGCC TAGTTCAAGT  
GTGCTTTTT TNATTTCAA TCAATTTTT CTCTTTTCT TTTGAGATA AACTATTAA AAGTACTACT ATATATATAA  
AANCTCAAAT CAACTTTTG GCCTCCTCT CGTGTACCAG GGAGTATATT CTGACG

SEQ ID NO:1457: (Length of Sequence = 314 Nucleotides)

GAGGATTCAT AAGTAGAATT TATAAGAAC TCAAAGAAT CAATAACAAA AAGACTGGCT ATGGCCTTCG NAGAGCAGCT  
GCTGTCTCG AAATCAGAGG ACAGTGAAGG GAAGTCCGAA GATGAGCCTG ACACCATTC GACATCCGTC CTCCTGCAGG  
TGGTGGAGCT GCTAGGAAAC TTCTTNTGGA CCACGGACAT GGCAGCCTGC NTGAAGGAGC TTGTTTTCCA TCTCTGGCA  
GAGCTCCTAC GCACGGTGCA CACCCTGGAG CAGAGGCGGC ACCCGCTGG CCTGTNCTCC TCANTCGCCC TCCA

SEQ ID NO:1458: (Length of Sequence = 254 Nucleotides)

GTTCAGTCA CAGATGTTT ATTATCACTA TTCAATATTA TTAAGCATCT AATAAGTATA AGGATGCATG AGTCAAGGT  
CCCTACCTTC AGGTGGAAG CAGGAAAGAG ACCAGATCCT AGAACAATAG GACATGGTAC CCGCTGCCTA GACGGAATTT  
AGAATCCGGC TGGGGTGAAG AGATTAAATGA GCGAGTCATG CCATCAATGT GCTGTAACTG AGGTCTTAAA AACCACCCAG  
CCCGACACA AACT

SEQ ID NO:1459: (Length of Sequence = 343 Nucleotides)

AGAAAGGCTC AGGGATTAAG TAAAAGGCT AGTACATCTG GGCTCCATTC CATTATTTAG TCATCCAAA GAAGTGAAGT  
GGAGGATAGT GAGCATCTAG TATATGCCAG GCACTAGACT GGCTGCAGAG GATTCAGAGA TACAAAAAC ACACCTTGTA  
CCAAATTAAT TTGAATTTAC CAAGTTGAAT GGCAAAAATA TCTTAAAAAT TTAGATGCCT TGATAAATGT AGTGGTATAT  
TATGATAGCC ATTCTATGCC TTGAGATACC GTGTATTCTA TATTGTATAG TTGAGGGATT GAGGCCAGTT GGGAGGAATA  
AATTATAGCT TGTGCTTATC AGG

SEQ ID NO:1460: (Length of Sequence = 348 Nucleotides)

ATTGTCAACA GTGTTTTTAT TTATACCTAC AAAAAGAAAA CAAGATGATG GTATCAAAAG GACAATTTAC AACTAAGAA  
TAGTAACATA GCTTTCAGCA TCCTGTGCTT GANCATLACA CATCTACAAG TCTTTCAAGT CTTAATGCAA CAGGAATGTA  
TTTGAGAGCC NGCAAGAACTA TCAATAGAGA GCACTGATTC CAAGCAAAAG CCACTAACCT TTTAGATAG AAGTCNCAC  
AACGNATTGT TAGGGAGGAT TTGGGAGAAG CAGCCCCTTT GCTTAATACA TINGGACCCC TTTCCCTTAA GTTGAGGTTT  
AACCCTTGAA TGCAATAACT TGGCATAA

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SEQ ID NO:1461: (Length of Sequence = 343 Nucleotides)

TGGGAAGATC AGGTCTTACT TGTTTTCTG TCCCTCCAG CGCTAGATCA ACACAGTGT AAATTAGTTG AATTTCAGTG  
GAGGAGATAA GACAGAAATG AAATCTGTGA AGATTGAGAC TTTCCTCAAGT TAAACCAGT CTGAGTTAC AGATCAAGAT  
GATGCCAGAA ATAACATCAC ACTGAAACAT CAGTCAAATG TAGTCATCAT GGCAAAGGCC AAATGTCCCT TTCTTTTTTT  
GCCTCCGCT GCCTGGGAAT TTAGCATCCC CTAAAGCCAC TCATCTGGGA CAGGATTTTA GGGTGTGTAC ATGTTTTTCA  
ATCTCCACAG GACCCAGCTG TGT

SEQ ID NO:1462: (Length of Sequence = 335 Nucleotides)

GGCATGGAGC AGGCAATGAC TTGTTTCATAG TCGCTGCAGT TATGAGCACC AGCTTGAACCT TAGGAACCTCT TATAAATTC  
TGTTTTCAAC CAAGTATGA GTGTCTGCTA TGTTGTCAGAC ACTGCGCTAG GTGCTGAAAT CTCACCTCTA CTGAGGAAGA  
CAGGAACATA AATGGTGATG ATCATTGCAT TAGAAGTGAT GCCACGGGAA TAGTGTGGGG CCTCTCCAGG GGGATCTNAA  
GGTAGGGAGA CCACACTTCT CCAGTGGTGG AGAGGGCAGA CAGCGTGTAT NGGGTCTCTA AGGTCTNATT GCAAAGGTCA  
TGTTTTAGCT GTTCA

SEQ ID NO:1463: (Length of Sequence = 382 Nucleotides)

GGACCGCTTT CGGTTCTCA GGATAAACAC GAGCATGCC ACCACGGTGA AGGCGGAGGT GACAAACACC AGCAGCAGTC  
COGGGACCAA CACGAGATG GACACCTGC TGGTGTCTAG GTAGGAGTTG GAGTGGCTCC CGGTCTCCGC CAACCCAGTG  
CTGTTTTTAC TGTGCGAAGT TAACGTGGGC GAGATCCTAG CGTACAGCTG AGGGCAGATC TGTTCATTGG AGAGGAGCAT  
GAAATCCTTT CTAAAGAAGT TCACCGCGT CTCACACTTN AGGTGCTCA TCAGCACTTC GGAACCCAAG CTTTCTGNC  
ACTTGCTTGA AAGGCACAAT TGTCAGGAG CACTNCCAGG GGTTCCTG GAGGTCTAT CT

SEQ ID NO:1464: (Length of Sequence = 187 Nucleotides)

AANGACCTCA TTTCAAGAA GAGCGTCTC CTGACAAGG ACGTTTCCCA GAGAGGAGAC GTGTTAGTGC AACAAAGACC  
AGGCCCTGGN AGCCACGAAA GCGCTCCAGA TGCTTGAGG ACGCGTCTN TAGCCGNGTG GGCCACGNC GGTGGGGAC  
AGACAATGAC AAGAGGCAAG ACAGCCG

SEQ ID NO:1465: (Length of Sequence = 276 Nucleotides)

TTTACACAAT CAGTATAATA CTGATAGGAA AACTTGACTG AGTTCAGAAA ANGAAAACGA AGTAGAGATC TCACTTGAT  
CAGAACAAA TGTCAATCTA TTAGCAGATA ATATTCATCA GTATTTTTTG AAAATACAAT ACCACANGAA AGAAACAGTG  
GACATTGGA GGGCTTTGAG GCTGTGGTG GAAAGGAAT TATCTNCCCG TAAANCTAG ATAGAAGCAT TCTCAGANAC  
TTGTTTIGINA TGTTGCGCT CTACTGACAG AGTTGA

SEQ ID NO:1466: (Length of Sequence = 375 Nucleotides)

GGGTTTINAC CATGTNCCC AGGCTGGGCT CAAGTGATCC ACCCTCCTTG GCTTCTCAA GTGCTGGGAC TACAGGTGTG  
AGCCACGTG CCGGCTGGT TTTNTTTTT TNAATGAACA TGTTGCAAT CACGAGAGC ACCCTNATT CTGCATTTC  
TGGGTATAA CAAACATTGT CATCTCTGCC TACATTAAA AGGCTCGGT GTTATTTTAA TATGCTTTT CAATTTAGTA  
ATTAATCTA ATTTTCTTT GAGCTGAGAT GTTATTCATT GTTCTCTAG AGTTGCTTTT ATTTGTCAT ATATGTTTC  
CTTAGCATGT TTTCTGATC TCTTAGTTAT TAGATACCTG AACATTGAC ATTGG

SEQ ID NO:1467: (Length of Sequence = 319 Nucleotides)

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TGATAAAAGG AAAACGTTTT GATTATAGT ACCAAGTGCT TAAACACAAG GATAGTGTTA GATTTTCGAG TGACTTTCCT  
 TTTTGCAATT TTTGGCAGTA AAAGCCAAAC GTTGATTG TCCTTTTCAG AGTTGTCCAG CCCTTTTTC CTTTGTCAC  
 AATGATTCTA AATAGAATCT AATAAACCAA TGTAGCATT TTTTTTCTA AATGAAGCCC CAAAAAGAA AAGTGCCCTG  
 CATCATTTAA AAAAATAAT TAAATCCTCA TGGCCTCTAA ATTAGGTATG TAGGGCACTG AAAAGTTCTT AACATTTT

SEQ ID NO:1468: (Length of Sequence = 352 Nucleotides)

TTTGGTTAAC ATTCCAAACA TGTATAACCA ATTAACATGG CCTAGGGTTT TCCTTTTATT GGTATTCAC TCACTAACTT  
 GAATCCACAG ATATAAGCAG TATATAACCA GAAAGTTACA AGTAAACACA AATTATACAT GCAAATTTCT GTTCACAAAG  
 GTCACATGTG CAGGTACATG ANTTAGAAGC GTGCATCTAG GATTATGGCC AAAGTGTCTT AAAAATGCAG AAATGTAAAA  
 TTACATCTTG AAAATATGAA GAGATGGTCT ACACACTTCA AAAATCAAAT GTTGCTTATA CCAGAGATGT ATGTCAATCA  
 CGGGTTTCAA GTGACAAGCA GTAAGGATCC TC

SEQ ID NO:1469: (Length of Sequence = 427 Nucleotides)

GAGATGGAGT CTGCTCTGT NACCCAGGCT AGAGTGCAGT GCGAGATCT CGGCTTACTG CAACCTCGC CTCTGGGTT  
 CAAGTGATTC CCTGCTCA GCTCCCAAG TAGCTGGGAT TACAGGCGCC TGNCACCGCA CCCAGCTAAT TTTTGTATTT  
 TNAGTAGAGA CGGGCTTTA TCATCTTGGC CAGGCTGGCC TCCAACCTCT GACCATGTGA TTCACCTGCC TCCACCTCCC  
 AAAGTCTGG AATTACAGT GTGAGTCACC ACACCGGCC GGATCTGTT AGTTTTCTTT AATGCATATT GAGTTCTTT  
 AGTTTAAACA CACTTAT CTGCTTGA CCCAACTAT TCACTATGTT TCTGGGGGA NAGCTINGAA TCTGGGGTG  
 GNAGCCAATT TGTAAATAGC CAGGGTG

SEQ ID NO:1470: (Length of Sequence = 426 Nucleotides)

AGGAGTTTGA GACCATCTG GCAACANAG GAAAACCCG TCTCTACAA AAGAAAATTT GGTTTTATA TTTATTTGTA  
 TTAAATTTT TAGAAACATA GCTGGGCATG GTGGCACAG CCTGTAGTCC TAGCTACTCA GGGGGCTGAG GTGGGAGGAT  
 TGCTTGAGCC CAGGAAGTTG AGGCTGCATT AAGTGTGAT CACACCCTG TCTGCAGCC TGGGTGACAG AGTGAGACCC  
 TGGACTCCA GACAGGTGCA CACCACCACA CTCAGCTAAT TTTTGTAGA AATGAGGTCT CACTATGTTG CCCAGGTTGG  
 TCTTGAAGTC CGGGCTCAA GTGATCCACC TGTCTAGCC TCTCAAAGT CTGGGATTAC AGGCATGAGT CACAGTGCCT  
 GGGCCCAAT TCATAGTCT AACAT

SEQ ID NO:1471: (Length of Sequence = 372 Nucleotides)

AGAATATTAA AAAAGACCAG ACGCTTAAAG CAAGANTTGA AATACCTAGT TGTAAGATG TGGCACCTGT GGAGAAGACT  
 ATTAAGTTGC TTCCAGTAG CCATGTTGCA AGACTACAAA TATTAGTGT AGAAGGACAA AAGGCAATTC AGATCAAACA  
 TCAGGATGAG GTTAATTGGA TAGCGGGTGA TATTATGCAT AANCITATTT TTCAAATGTA TGATGAAGGA GAAAGAGAAA  
 TCAATATAAC ATCAGCTTTA GCAGAAAAA TTAAAGTTAA TTGGACTCCT NAGGTTAACA AAGAACACTT GCTACAGGGT  
 CTGCTTCTG ATGTGCAAGT ACCNACATCT GTAAAAGATA TNCGCTATTT CC

SEQ ID NO:1472: (Length of Sequence = 332 Nucleotides)

GGTAGAGACA GGGTCTCACC CTGTTGCTCA GGCTGGTCTC AAACCTCTGG GCTCAAGCNA TCCTTTCACC TTGGCCTTCC  
 AAAGTCTAG AACTGGCCAG GGGTGGTGGC TCATGCTGT AATCCAGCA CTITNGGAGG CAGAGGCGG CAGGGAGTTT  
 AAGACCAACC TGCCCAACAC GGTGAACCCA CTCTCCACCA AAANTACAAA ATTTAGCTGG ATGTGGTGGT GGGGCGCTCT  
 AATCCAGCC ACTCAGGAGG CTGAGGCAGG AGANTACTT GANCCCGGA GCGGAGGTT GCAATGAGCA GACACGGCT  
 GGACGACAGA GT

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SEQ ID NO:1473: (Length of Sequence = 434 Nucleotides)

GCCTTTAATT TGGTTTINCT ATGCCAGTAC AGAAACATCT GGACAACACT CTGAGCCTG CAGAGGCTCA CGGCCACACC  
 CACTTCTGCC GCAGGACTGT CTGTTGAGGA GCGAACCGA TGAGGCACAG TAGCCAGGCC CTCCGAGGG CTCCAGAAGC  
 TCTAGGTTTA CGGGGTCACC TTCTTGTAGG TGACGTGAAG ATGCTGAGTC ATTGGCTGTA TCGTGGTTGC CATGGAGACC  
 GTCTGCTCAA GTTTGCCTTC AGAATTCAGC CTGAACCTCC GGGTGATCTG CTCTACGTGG GGCTCCTTGG CGAAGGAGAT  
 CCTGGCGATG GAGTGGGATG CGATGCACAG NTCCTGCCG TTCAACTGCG CCTCTTCAC TTTCCANCAC GGCTGTTTTT  
 TTGGCGTGAC AAAAGGCCAC CTTTTTGGTG TCGG

SEQ ID NO:1474: (Length of Sequence = 402 Nucleotides)

GACGTINAGG TGGGAGGTTC GTTTGAGCAA CATAGTGAGA CCCGCTCT ACACAAAAC AAAAAAATA AAAAATTATC  
 TGAGCATAGT GGAGCATGGC TATGGTCCAA GCTACGTGGG AGGCTGAGGT GGGAGGATG CTGTCNTCCA GGAGTTCAAG  
 GCTGCACTAA GCAGTAATGG TGCTACTTCG CTTCAGCCTG GGGACACAG CAAGACCTG TCTCGAAAAA ATAAATAAAG  
 TAAATAAAGT TGAGAATTTT GTATTTGGT ACAGAAGGTC TATGCCTTT AAATGCTCCA TTTGGACAG CTTAGGGCAG  
 GACGCTCTGA AACTGGGAAG CCTGGGGCCC TGTACANTCT TGGCTGTCCC CTGTACANTC TCCTAACTCT AGAGGGCTGG  
 TT

SEQ ID NO:1475: (Length of Sequence = 324 Nucleotides)

TTCATACCT GTGCTGTGTC AGACCAGGCA GAGTCATCTC ATTCCACTGG TCTAATGGAT GGCAATTGAA TTTAATTAC  
 AAAACTCCTT TGACTTAGTT TCATACTGTG CTGAATGTAA TGAATCCTC TCTGCCCCC TTATCTCTCT CTCTTCACT  
 CTCTCTCAAC TAAAAATTGT CCTTAACIAA CATCCACTTT AAGAATATTA AAGGCTATAC ATTATACTTA AAAGATACAA  
 TACAGTCATC CCCCTTTCCA TGACTTAAAT TGTATAACAT AAAATAATTA AAAAGTACT TGGATAGTG ATACACAGTA  
 TAGG

SEQ ID NO:1476: (Length of Sequence = 244 Nucleotides)

GAAAAACCAG AAACCTCAAAA TCAGAGTGCC TCTCTCTCTC CAAAGGAACA CAGCTCTCA CCAGCAACGG NACAAAGCTG  
 GACAGAGAAT GACTTTGACA AATTGAGAGA GGAAGGCTTC AGAAGATCAA ACTACTCTGA GCTAAAGGAG GAAGTTGGA  
 CCNATGGCAA AGAAGTTAAA AACTTTGAAA AAAAATTNGA CGGATNGATA ACTAGNATAA CGATGCAGA GAAGTCCTTA  
 AAGG

SEQ ID NO:1477: (Length of Sequence = 338 Nucleotides)

ACAACACATA CTGAAACTG ATTATGACTG TTTTGAATG CATTTTGATT CCTTAGCTAT GCCTCTCAGG TGAAAGGACC  
 AATGGCAAGA GGAAGCAGAG GATTGATGCA CTAGAAAATA CTGAGAGAGA TCAGAGTATT CTGTCTACTT CACTGAAGAT  
 ATGGTCTATT GAGGGAAAAC TAATTAACAG TTGATCCAAG GAACAAAAGA ATGCTGTAT GTGACATTTT GTTGGGAAAC  
 TGACTGTAAAT AATAATAAAN CAAATGTCCA GAGGAATGTG TCACATAATT NCAGTGTTTA TGGTTGATAA TTCAAAGGCA  
 TAGATGAATT GGGATTCT

SEQ ID NO:1478: (Length of Sequence = 397 Nucleotides)

ACCTTTTCCC ATTCTGATAA TCTGGCCATG ACTAGCAGAA GCACAGCTAG GCCCAATGGG CAACCCAGG CCAGCAAAAT  
 TCCGAGTTC AAATTGGTCC TGCTGGGAGA ATCTGCAGTG GGAAAGTCAA GCTGGTAAAT AGCTTTTGTG AAAGGGCAGT  
 TCCATGAGTA CCAGGAGAGC ACCATTGGAG CGGCCTTCCT CACCCAGTTC GTTTGINTAG ATGACACAACT AGTGAAGTTT  
 GAGATCTGGG ACACAGCTGG GCAGGAGCGA TATCACAGCT TAGCCCCCAT GGTACTACAG GGGTGCCCAA GCTNCAATCG



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TGGGTTTACG ACATTACTAA TCAGGGAAAC CTTTGTCCCG AGCAAAGACA TGGGGTGAAG GGACTACAGC GACAGGC

SEQ ID NO:1479: (Length of Sequence = 389 Nucleotides)

GCTAGAGNGC CGGCTTGCGG GGTGAGTGG CCCGAGCTAA GGGTGCGGAG ACCCAAGGGC GGCGACTACG ACGCGGTGGA  
TATCGGTGGT AACGACGGCC TCAGCAGGCG GGAAGATGA AAGGCCGNT CGAGCTGGGA GATGTGACAC CACACAATAT  
TAANCAGTTG AAAAGATTGA NTCAGGTCAT CTTTCCAGTC AGCTACAATG ACAAGTTCTA CAAGGATGTN CTGGAGGTTG  
GCGAGCTAGC AAAACTTGCC TATTTCATG ATATFNCITGT AGGTGCGTA TGCTGTAGGG TGGATCATTC ACAGAATCAG  
AAGAGACTTT ACATCATGGA CACTAGGGAT GTNTGGGCAC CTTACCGAAG CTAGGAATAG GGACTAAAT

SEQ ID NO:1480: (Length of Sequence = 384 Nucleotides)

CTGAGAGCCA GGAGCTCTTG CGGAGAAGCC ACTGTCTGCA CGCCACCTGC TTCGATGACC CTGCTCTGCC ATCCCTGTGC  
TCCAAGGGCC GGGCCCTGCC GTTGCCCTGTG CCAGACGGGT CTCAGGGAGA TGCCGGCCAG CAGGTATGCA TGGCGAGGCC  
TGGGCATCAA GGCCCGGATT CTATGGCTGC CAGTTTCATT CTCTCGTTGT TTGTCCCCCT AGCAAGACTT ATGAGGTTCC  
TTGAGGACAA GACTCCCTCC TGCCACCTGG TCTGTTTCTT GAACATTAC TGCCTAGCA CGNCCCGGG ACGCAGNCCT  
TGGGAATCAG GCCGTGCGCC ATGGTAGAGC GGCTNGCACT GCTCGGCACC GTGACGGACG TTG

SEQ ID NO:1481: (Length of Sequence = 257 Nucleotides)

ATGTCTAGAG CTATTCTGTT TTCCCAAGCC ATTTGGCTAG TAGGCCCTAA TTGGTCAGTG GGTCTGACC CCCCAATCCC  
TACCTCAGCA GCAGGAAAGG GAAGTGCTGG TCTCCACTG TNCCCACTAA GGCCCCGTGG TATCCTGGCA GAAGCCTCTG  
CATGTATCTN CGCTCTGAGG ATGGGGGTTT NAAACAATA TAAGACCCTA CGTCTACTA CCTTGAGCTT GGCTCTAAAA  
CCACGGGAAA GGAAGAG

SEQ ID NO:1482: (Length of Sequence = 345 Nucleotides)

AATTGAGCTC AGACTAAAGG AATTCCTTTT TGAATAATA GTGATTAAGT TATGATATTC CTGTTGGCCT AAGAACAATG  
CCTATGATTT AGTTGTGTTA TGTATATTG TACTTATAAC CAAACAATCG ATTTGGGTACA AGTAGCCCTA GGGCAATACT  
TCCTTAAAAA CATGTTTCTG ATAACTAAA GCCTTAGCAT TAACCAGAAG TCATAATTTA ATAGTATTGT AAAAATACCT  
CATTTATTTT AAATCCCTGT TTGGGGTAGA GGATTACAGT TGTCAATTCA AATACATGAA TCTCTTGTC AAGNGGTAC  
TTTGACAGTT TCATGGGAGG TCAGG

SEQ ID NO:1483: (Length of Sequence = 344 Nucleotides)

CTGATGTACT GTTTTAATAT GCTGAGTACT GTTGATTCAA CAACAAACCT TAATGGGTGA TGAGCTTTTG CATACCAATA  
TGAATTNTC AGCACTTCG AAAACTGGCC ATCATTTTNC AAATTCACAA TTGCTGGAT GTCAGGGAAC AATAGGAAGA  
AGAATGAGCG TCAATTTTCA TGTCTTCTT TGCTTCTTCA CTGGCCTTCC ATAGAAGTAG TCAGAAAAA ACAAGCACC  
ATCAACCACA CTTACAAAC AATTCATGTT GGCCTAAGCT TTGCTCAACA TTCATATGAC AGAAGGTAGN ATAATGAAAA  
GGGACTGCTG GGCATCACTT TCCC

SEQ ID NO:1484: (Length of Sequence = 380 Nucleotides)

TTCTTAAAAG CAGTCTTTCC TACAACCTGT ATGCAGTAAG TCACTTAAGC ACTTAAGTGT CATATGGGTA CTTACATGGA  
ATTAGACAC TTCTGAATG GAATTAGAAA AAGGCAAAAT GTGCATCTA CTGATGCATT CATTTCTTAC AGAGATATGA  
TACCAAGGGC CAATAAGTGA ATAGAAAAAG GGAGGAGGAT TTATTAAATG AATGAGTTCT AACCTGTCT CTTACCAGCC  
ATATGACTTT GGGNTAAATA ATCAACGCC CAATGAGCTC AACTGTCTAT TATTAGGGGA ATTTAAATGA GAGAATGCAC  
ATTAATTATG CATTCAGAG TACATGGGAA AATAGTAAAA GCTTAATATT TAATACGTC

SEQ ID NO:1485: (Length of Sequence = 334 Nucleotides)

GAAGGAGCGG GGAACCACTT TCTCACTCTC CTCCCACTTG CTATTGTICAG AAGAGCGAGA TTTCAGGGCA GCAGAGAGCA  
TCAGGAGATC AAAAGAAGAC ACTGCTGGGT GGTCCCTTAG CAAGTTTITAG CTCTTTTNC TGTCTGGAGA GTATTCTCTG  
GGCACAGTGC CAAGTGTCTC TAAGAACTA GTCATGCCCTG ANCTTAAGGG CTCGGGATT CTGGGTGGTG GATTTCCTTA  
GGCTTGCTG AGCCTGCCAG TGCTCTCTC TGTCGCTCTG ATTTCCATTG ACGCTGAGCA GTCTGCACTN CCTTGGACAG  
ACCCACTGGC ATTT

SEQ ID NO:1486: (Length of Sequence = 164 Nucleotides)

CTGAAACGGA AAGATGGGCG TGTGTGTCCT CTAAGCCTAG GCTTCTTGCA CTAAAGCACC AAGGGCATCG CACACAGGCT  
TGGCAGAGGG GCCATGGCCA GANTCACCAC CTTGAGACAA GTATGTTGGA GGTCTCGAAT CCCTTGGCAC CCCCAGCAT  
GCAG

SEQ ID NO:1487: (Length of Sequence = 298 Nucleotides)

TTGAACCCAG GGGGCAGAGA TTGCAGTGAG CCGAGATCGT NCTGCTGTAC TCCAGCCTGG GCAACAGAGC GAGACTCCAT  
TTCAAAAACG AGAACCCAGA GGGCTCACTT GCCCTTCCA CCACACAGTG AGAAGGCACC ATCTATGAGC CAGGAAGCGG  
GCCCTCACCT AACAGGATCT NCTGGGCTT GACCCAGGNC TTTACAACCT CTAGANCCAT GAAAAATTTT TGTGTCTCT  
AGCAGNCCAA ACAGAATTAG AACCATTAAAT TTCTATTTCT CCTTAGCTT AACACTGG

SEQ ID NO:1488: (Length of Sequence = 343 Nucleotides)

TTGCTAGTTC AGGNTCAATG TCATGGCTGT AACTAATATA GTACATTCGG CAGTTGCAAC GCGAAATGAT COGCTGGACT  
TGCTGGGCTT GCTGTGCTC ANCTGGCTGG TTCCAATCTG TGGTGTGGT AACCATGCG CCCACTGCTT GCCACTCTC  
CATCAGCTCC TGCACAGAGT CCAGACTACG CTGCGGTGC TCGCTCTTTT GCCCAGGTG AAGTGCAGTG GCGCAATCTC  
AGCTCACTGC AACCTCCGCC TNCGGGTTC AAGCAATTNT CCCCACTCA GCCTTNCAG TAGCTGGGAT GACAGGCGGC  
CGCCACAACG GCCAACTAAT TTT

SEQ ID NO:1489: (Length of Sequence = 412 Nucleotides)

ATTACCTTTT TATAACCCAA GANTGCCATT ATTACACCCG GAACCTCAC CAAATAAGTA GGAAACTAC ACTGAGAACA  
ATTGCGCCCA GCTGTCTCTG GCCATTTC CTCTCTACG CCTCTGTGC ATTCCAGCAA TCTAACTCGA TGAATGATCT  
TCCAGTTGGA AAGATGGGGA CTTCACAATG TGCAGACCA AAGATCTGTC TTCCAAAGGC CAATCACCAC TGTATCTTTC  
GTTCCCTTAA ATGTGTTGT TTATTGAAT ATATTAAGGA ATAATATCAA GGGTAATTAT CTATGTATAA AATGTATGNT  
TAATTTTITA GGGGACCATC ATACTGTTT TCCAGATGG CTGTACATT TACAATTCCC ACCAACAATG CACAGGGTTC  
CATGGTCTCT AT

SEQ ID NO:1490: (Length of Sequence = 356 Nucleotides)

ATACCTTCTT TCATTTAAGC CACCCAGTCT ATGGTACTTC GTTATGGCAG CCTTAGCAAA CTAAACGGA TTCTCATCA  
GGTTGAGATT TINCTAAATA AAATGTGTTT GTGAGGGTGG TACAAGCAAC AGTGATATAT TTCTTTAAGT ATTTTCCCCC  
AGCCAAATTC CAACAAGACA ATAATGTCTA ATGCACTGTC TGGTGAATCG GAAAATCTCC TGAATGAAAT AAGAGCTCT  
AATACCCAAA AGGGAATGAA GTGAGTCATC ACCACAGCT GTGAATGAAA ATAAGTCTC TGAGGAAAAC ACATGTAAAA  
AATGACACCA TGTGGATTAA ATGAGGATC ACAAGT

SEQ ID NO:1491: (Length of Sequence = 335 Nucleotides)

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TTCCTACCA AAACAGTTA CAACAGTTCC AGCCAAATAA CACAGGCTAC CCCATATGCC ACGACACAGA TCTTGCAATC  
 CAACAGCATA CATGANTTGG CTGTGGGTCT GCGTGATCCN CAATGGAAAA GCTCAATTCA GCAAAAAACA GATCTGNTGG  
 GATTGGTTA TTCTCTACCT GATCAGAACA AAGGTAACAN TGCCTTACTT TACATTCTCG ACTACCGNIT GGCTGAGGGA  
 TTGINTAATA GAATGCCACA NAACAGTCT NAGGATTTTA GCANCCACCA GCTCTNACAA CAGCTCAGGA AGGAGTTGGC  
 AGTNTCTCAG GTGGG

SEQ ID NO:1492: (Length of Sequence = 321 Nucleotides)

GACTTCATAA AACATCCTTT ACTATATTTT NRAAGAAAGC AGAAGTAACA GCAATATATG TAAAAGTAAT GNTTTAATGN  
 CTATAAGCAA GNCAAAGCAA TAGAATTGTG CTTCCTTTGC AGACTGGGNN CAATGAAATG TTTAGCTACA ATTINCCCAT  
 ACAACATGA AACAATATTC ATATAGNNTA ANCACCTCA CAAATAACTG ATGGGTGATG ANCACACACC AAGTTGACCC  
 AAAGCAAAAA NTAACTGAA AATTGTTGGG TGGGGTTATT CATATTTTAA ATTCAACATG CTGCTCTAT TTAAAAATAC  
 C

SEQ ID NO:1493: (Length of Sequence = 315 Nucleotides)

GACGGAGCGA GGGGACAGAG CCCAGGGATG GAGGCGGGAT GCGGGGGACA GAGCCAGGG ATGGAGGCGG GATGCGGGGG  
 AGCAGCTGGT AATGTGCAGA GACTGGGAGA GGGCGGTGTC CAGGTGGAGA GTATTCAAG GAAGAGAAGG ATTAACAGCG  
 TCCACTGCCG CAGATGGGCC AANCAGAGAT GGGACTGGAA ACCAACCCT GCATTTAGCA TCCTGGGNNC TGCTNATAAC  
 CTTGGTTTGA TGGCTCTCA AGAAGAGCCA NAACCTTNA AAGTTAGTTC AAGAGAGAAG GGGNGAAGAG AACT

SEQ ID NO:1494: (Length of Sequence = 405 Nucleotides)

AAAAGTTGAC AAAACATAAA GTATCTCTAG ACAGCAAGGA AATAATTTCA CGAGATTGCT AAATTGATGT CAACACCTGC  
 AGTCTAAAAT TTATACAGTT CAATATGTTT CATTTGATCA CTGGCATGTC AAATATAGAA CAGCTATGAC TTTGCTGGCC  
 AGTAAATTAT CTAGCAGTGA AAATCACTTT TTAGGAGAGT CGCAATCAAA CATGTTTAA CGTGGGAGCC TATAAAGATG  
 CAAATCTCTG AACAACAGTG TCTAAGAAAA GTACATTGGG TCACTCTGAA CAGGTGGTAT GAACATTTGA TTTAACTGCA  
 AGATCINNG CINTTACGG GCTTTGTCAC CATCGNATGA ATCTTACATC CGCTGATGAC TNAGAGCAAG CAGGGGCGAG  
 CTGCC

SEQ ID NO:1495: (Length of Sequence = 364 Nucleotides)

CGTCTAATGA AGAGCTTCGA AACTTGTCTT TGTCTGGCCA TGTTGGGATT GACAGCCTCC CTGACCAGCT GGTCAACAAG  
 TCTACTTCTC AAGGATCTG TTTCAACATC CTTTGTGTG GTGAGACAGG CATTTGGCAA TCCAGTTAA TGGACACTTT  
 GTTCAACACC AAATTTGAAA GTGACCCAGC TACTCACAAT GAACCAGGTG TTCGGTTAAA AGCCAGAAGT TATGAGCTTC  
 AGGAAAGCAA TGTACGGCTG AAGTTAACCA TTGTTGACAC CGTGGGATT GGAGACCAGN TAAATAAAGA TGACAGCTAT  
 AAGCCGNTAG TAGGNTATAT TGATGCCAG TCGAGGNT ACCT

SEQ ID NO:1496: (Length of Sequence = 370 Nucleotides)

GTCTCTTGA GCAAGGACCC AGTTATTCAT CTTAATCTC AGGGGAATCT CTGTAGAGAT GAAAAGCAGG AGAACCAAGG  
 CAGCCTGGTC TCCTGGGTG ATGAAAAACA GACTAAGAGC AGGGACTTGC CTCCAGCTGA GGAGCTTCCA GAAAAGGAGC  
 ATGGGAAGAT ATCGTGCCAC CTGAGAGAAG ACATTGCCA GATTCCTACA TGTGCAGAAG CTGGTGAACA GGAGGGCAGG  
 CTACAAAGAA AGCAGAAAAA TNCACAGJA GGGAGGCGGC ACATCTNCCA TGAATNTGGA AAGAGTTTIN CTCAAAGCTC  
 AGSCCTTAGT AAACACAGGA GNATNCACAC TGGTGAGAAA CCTACGGAT

SEQ ID NO:1497: (Length of Sequence = 376 Nucleotides)

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CACACACATA CAAATCTGT CCATTGCGG GAGNAATNG TATGTATGN AGTGGAGGG TATTAAAAAT CAGTTTTATT  
 CCAAAGATT AAAACTAGAC ATGACTTAA AACAAATTCT GGAGCACTGC TTGCTGACAA TCTCGTAGTT CTCTGCTGCA  
 TTTGAGTGCA TTTTGTGGCC AGTCCATCAG GCGGTACCAT GGGATTATAT TTGAATGTGT GGTGCATCCT TCCTGGATGA  
 AGGATGTGT AGGGACCTTG AACCTCAGCT GTATTAACT GTAGCGCTC CAGTCAGTGC ACTAGATGAA ACTTTTAGAC  
 ANCTGAATT CTGTGGGTC CNTTCTTTT CTTTATGTA GGCAGNCTNC AGCATG

SEQ ID NO:1498: (Length of Sequence = 281 Nucleotides)

TTTATAGGAC TTCTAATCTA ATTTNCTAT AGTGTGACTA AAAGGGAGGC AAATTATTGG AACGGATTAT TCAAATGGNT  
 CCTTAAATAT TGCTATGTAT AATAAGCCAG TTATTATATC AGGACCATGT TCTCTGTAGG CCCTGTTTT NCTCTCTCAT  
 TCTCCAGTGG CGGCGGCGGG GAAGGCGGAG GCAGAGGCAG CAGCAGCCGC GCTGGCTGCA AATGAATGAN CCCCCAGCTT  
 GGGGGGAGGA CTCCAGGTGA GCCTCTGCCC TGGGGAGGCC C

SEQ ID NO:1499: (Length of Sequence = 395 Nucleotides)

TTTATCACA CCGTTTTTC CAAGGGTCCT GTTACGTACC ATTACCAATT CTGCTTAGCA ATGGCTTGTG AGATGGCAAT  
 TATTCCTTCA GCATGTATTT TNATGTTTAC CTTCCTCTCA CCTAAATTCC TCCCCACCC CAATAACAAT TAGTTGTTCT  
 ATTTGCATGT AGCCAGAGCA AAAAATGATT TCTTTCCCTT AAGTTACTAT TATTATAAAA GGGACGATAA ACACATGAGT  
 CATTATACCA CAAGTATAGT GTGGAAAGGA CTCTAAACAT AGGCTCACTG AAGAAGGTGG CATTTGGGCC AGGGCTCAAA  
 ATAAGGCAGA TTCAGATTTG AACTGAATAG ATGGAGGAGT CATTTCAAAC AGAAGGAATG NCATAACATG TGGAG

SEQ ID NO:1500: (Length of Sequence = 272 Nucleotides)

CTGAGTAAGN GTTCCAGTC GGTCCCACTG GTCACAAATT TTNTGGCACC GATCATTGAC ATTCACAGCG TCGTGATAGT  
 CCAATTCAAT GAGCTCCTGC GCGATGGCTG CGATCTGCTC CACGCGGTCC TGGTGGCGTG CCAGGTGCGT CTGGAACGNC  
 TCGTGCTTCC GCAGCAGAGC CCGNACCTCT NINAGCGAG CCGACTGTA ATCCTTNTGC AGCAAGATCT GCTCTTTGCC  
 ATAAGCCCAA GTCTGTGCG TTGAGGCCTT CT

SEQ ID NO:1501: (Length of Sequence = 394 Nucleotides)

TTTTTTTCC TGACCTGTC ACAAGCTTTA TTGTCCCGAG CACAGACTCG CCACACTTCA ACAATTCCAC TGTGGGGAGG  
 GGAGGGGTGA ATGAAGGACC TGGGGAGGGG ACATGGCTGA GCCACANCCG GCGGGCCACA CCGGGCGGGC TGAGAGGCC  
 ACGGAGGCAG AAGCTCCCAA GGAACCGCT TCTTGACAC CCGTCACCAG GAGCCACCT CCGGGGGCTC AGNTCCTCCC  
 GGCACCTTCC TAGATGGACC TCTGGCTGTT AGTAGACTAA TCGGTGCCCC TACOGATGGG GCAGAGCTGC CTGATTTTTG  
 CTAGAAAGAG CTGTATTTGA NCTNGGTTA GGNCACTAAA GCATGTTCT AGACGGCTGT TAATAGAACT NCAT

SEQ ID NO:1502: (Length of Sequence = 373 Nucleotides)

GAAACAAGGC ATAATGTTGT CACAGAATCA GAGATCCAGT CTCACTTTTC CACAAATCTC CAAATCTCCA GTCTTATCTT  
 GTGTGCTCTA ATGGTTTGGT TCAATCCCTT TCCAATCTTT GTTTTCAAAG CATGGGGCCT GAGTGTCTC CACTCCTCTT  
 AAGAAAGGAG CTTGGGTGGA AGGGACCATG CTGACCTCCT CCATCAGAGG GCTCTTCCAG TAGTATCTC GGATGCAACC  
 TCCATTTCTC AGTACCAAT ATTCTCTGTA TCAGCTTGT CCTTCTGNN GGGATGCACA GTGATCCGGG CCACCACTGT  
 TGTGTCTTG TGCTTCTGCT CTTTCTATG GTTTCAGNT ATTTTCTGGG GTT

SEQ ID NO:1503: (Length of Sequence = 266 Nucleotides)

GNCAACAGGC CAGTNTTTAA AGAGGGTCAA GTGGAGGTGC ATATTCCAGA GAATGCTCCC GTAGGTACCT CTGTAATTCA  
 GCTCCATGCC ACTGATGCAG ATATAGGCAG TAATGCTGAA ATCCGGTACA TTTTGGTGC CCAGGTGCCC CCGCAACCA

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AAAGACTCTT TGCTTTAAAT AATACTACTG GGCTGATTAC ANITCAGAGG TCCTNNGATA GAGAGGAGAC AGCCATTTCAC  
AAAGTGNCG TGCTGGCTAG TGACGG

SEQ ID NO:1504: (Length of Sequence = 311 Nucleotides)

ACTGGATGGA TGTTTGATCT GTGTTGGTCA TGAAGTTGTT TTTTTTTTTT TAAAAAGAA AACCATGATC AACAGCTTT  
GCCACGAATT TAAGAGTTTT ATCAAGATAT ATCGAATACA GCATGGGATT GGGAAAGTTA ACTAAAGGTA TTTGAGCTTG  
CACTGGATCT TGAAAGGTAG AAAAAGGGAG CAGGAGGAAA CTCATCCAGG TAAGAAAAAT AGACTGTNCA AGATGGGCAT  
GAGAAACAGT GAGGTCCCN GCTGGAGGTG GGTGCTAGTC ATGTTGAGCA CTNCTGGCAG GAGAGGTTTT T

SEQ ID NO:1505: (Length of Sequence = 363 Nucleotides)

CCACTCATGG CAGAAGGGAA GGGGAGCTAG TGTTGTCAGA AATTGTATGG TGAGAGAGAA GAAACAAGAG AGAGGGAAGG  
GAGATAGCAG GCTCTTTTCA ACAACCAGCT CTCATGGGAA ATCATAGAGT GAGAACTCAT TCACTACCAT GAGAATGGCA  
CTAGGCCATT AATGAGGGAT TCGCCCTAT GACCCAAATA CCTCCATT AAGCTCTACCT CCAACACTGG AGATCACACA  
TCANCATAAA ATTTGGAGGG GTCGAATATC CAAACNTAG CAACTTGGAA CCACCAGAAG CTGGAAGAGG CAAGGAAAGA  
TTTTNTCCTA GAGGCTTCAG AATAAGGTAT TGCAATTCTG AAA

SEQ ID NO:1506: (Length of Sequence = 177 Nucleotides)

CGGACAGAGC AGGGCAGAAA AATGAGGGAA GGATGACAGA AGCTCATCAG AAAGCCAGTA ATACATAAGA TTAGTTTTNT  
CAGCAAAACC TNGTAAACTT TGACGTAAA AGACAAATAT TTTGATCTCT CATTCCTACT CTCAAAAAGG TTTCTAGTTC  
ATATGTGTTTT GCTAAAA

SEQ ID NO:1507: (Length of Sequence = 345 Nucleotides)

CTTGCTTGAT TTTCCCTGT GTGTCAGAGA ATGTGCACAT TGAAAGAGAG GGAGCTCTCC ATCACCAAGA GAGCCCAAAA  
ATAGCCCAAC TGATCATAGC CGTTGTAAAA ATATTCATGG ATGTAAGGAA AGATCCTTTC CCAGTCTGAT GTCCTTGAC  
TTGTGATTG CTAAATTGA GAAGCCATCA CTACACAAC CTGTTTTATA GACAAATCCT TCCAGTTTCA GAAGAAAAAA  
TGTCATCTAT CTCACCTCC ATCTCTTTT CAAACTTCGA TAGATGAGAA GAAAATGGTG AAATAAATTT TTTAGAATCA  
GTTTTGCAAG ATTGGGTTTC AAGGA

SEQ ID NO:1508: (Length of Sequence = 326 Nucleotides)

AGTTGGATT CAGCTACTCA GAGTAATGG AAAAGGCCAC AGCCTGGTGG GCTTCACAGC TTTAGAGAC CTGGTAGGGG  
ATGGCTAACA GGTTCTNCTG CCAGGAGACA AGTGGCAGAC CCAGGTGTGA AACTTTTACA GGTCCACCA AGCCTTTCTT  
ATGGAGCACA GAGCATAAGG ACAACTTCTG CAGAAATGGA ATGGGGTACT TGGAAACAAA AATACATACA CTCCTTTCC  
CACCTGCCTC CAGCTTAGTA GCCCATAGTC CTCCTTGTC CTCACACTGA GCCAGGGCCT GNCCTAGATG ATGAAATGCA  
TGGCCT

SEQ ID NO:1509: (Length of Sequence = 329 Nucleotides)

AGTATGGGTC CCTTGGTACT ACTCAAGGTT TACAATATTG CATTAAACAC ATTGAAAAAT ACACGAGAAC CTTGAGGGAT  
CACATTTTAC TGCAATATGT GATTTCTGG TGAGACTCCT TGTCGAGAGA TGATTAGCTC ACAGAGCGTT GTAAGCACGT  
ACTCGCAACA CCTGAGCATG CCGCAATGGC AACAGGAGGT ATCTTCACAA TTATGATGGT AGTACAGTAT GTACTGCAST  
TGTTTACACA GTTATGATTT AGTACTACAT CTTTACANIT GNTATTNCT TTNCTATTTT GAATGGTATG TACTGTCTGT  
GTGTACATA

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SEQ ID NO:1510: (Length of Sequence = 247 Nucleotides)

TAGGAAAGAG TAAGANCTTC TTTCAGGCT GGAGGTGCTC GTATGGTGGG ACAGGAAAGG GGAAAAGAGA AAGGGGCAAC  
ATGGCAGACA TACCACGGTT CCTACAGAGA TTAGGGGCG CCCTGGCCCG GGAAGTACAC AGGGCAGAGA GCTGACTCTC  
AGGCCAGGAA GGAGTTTAGC TCTNACCCAT CCTCANGGAC CACGGCTCTC CCCAGCCTC AGCTGACACA CACACAAAGG  
AGCGTTT

SEQ ID NO:1511: (Length of Sequence = 369 Nucleotides)

CCACTTGCTC CTTTATTAC TGTCCTTCCT GTAGTGTA TTGGGATCC ACTGGGAATC ATAGAAAGGA ATCAGTGCTA  
GGTCTGTG GGATTGCACC CTGAGGGATG TGGCTTTGGC TTCTCTATCA ACCTTTCTGT TCCCTGTGC TATAGGAGTT  
AAGTCCCTTT NATGCCCCCT ACAGTGGATT ATAGCTATGG CCTGTGGCAG GTGTATTGTT TACAATAGCT GAAGAATTT  
AGGCCCATGC TTTATGGGG AGGGTTTNC TAGCTAGTAG TCCCTTTCT TTCTAGATTG CAGCATAAGC GTGAACCNCC  
AAGGAATGCC ATATTTTAGA ATCCTGATAT AGGATGGTTA AGGCTTTT

SEQ ID NO:1512: (Length of Sequence = 236 Nucleotides)

ATGCATTAG AAAAGACAGC CAAATGACAG ACTGATAAAA TATTTTCATT ACAAATGG TTGAGAACTA CCGTGTGACG  
TAAATGAAGT TTCTATTACA CATGTACTAA CAGAGACTTT TCATTACATA TTCTAGGATA TATTTAAAT ATATGTATAT  
TTTGATATTA AGGAATATA TTTGTGTGTC ATTTTACAAT GTGTAACAC ATATATATTA NGGCCTTTCC AATAAA

SEQ ID NO:1513: (Length of Sequence = 408 Nucleotides)

CATTATATT CTCAGTGTG GAAATATTT NATATGCCA AGACCATAAT GTGAGGNGTG CAGCTGCATA ANTCCCTGAG  
AGAAGATTAG TGGGGCTAGC ACCTTACAAG GAAAGACAAG CTGTGTGGCT GGGCCCAAG ACAGTCAAAT GTCTGCCTGA  
CAATCTCCAC ACAGAAGGGT TGCTCAGATC ACTTAGGACA CCCAGAAAGA GCTCACAAG GGCAACAAC CTAAGGCTGN  
TATTCTCCAT CTAGCGGTAC TTACCTGGGA ACTGAGTGGC AGTGGACAGG AAGCAGGGCC TGGGCTAGGG AGACCTCAG  
GAGGAANGGG GACCCAAGAA GTTAGAAGTC CATTCAATCA TATACTCATT CATTACAGCA ACATGCGCTT GACACCTTCT  
GTTATGCT

SEQ ID NO:1514: (Length of Sequence = 359 Nucleotides)

TTCNCCAGGC TGGTCTCAA CTCCTGGGCT CAAGTATCC GTCCACCTG GCTTCCCAA GTNCTAGGAT TACAGGCATG  
AGCCACTGTC CTGGCTAGA AATATNTTT TAAAAGTNA GGATGTAGAA TTNCTAGCT ATGTAGGCAA GGCAGGAGGA  
GAGGGGCCCA GTGGGAAGC ATAGCCACA AGAGTATGAG GGCCTGANCC AGGATGGTGG CAACAGGGAT GGAGAGGAAG  
GCGTGCCAGG GCATGGTGGC TCACACCTTA TAATCCTAGC ACTTTGAGAG GCTGAGGGAG GAGGATCATT TTAGCCCAA  
AAGTTAGAGA CCAGCCTGGG GNAACATAGT TAAGGACAC

SEQ ID NO:1515: (Length of Sequence = 343 Nucleotides)

GAGCCCTTG ATGGCAAGAN CTGACCTTC CATCCTGGAG AAGAGGAGAC CAATTINATA TTATGGAGGC AGAATATACA  
GGACTGTGTG ACTAATTGGA CATGTGTGTC CATGGAGCTT GAAGGGGACA GAACACAGG TGCAAACTG GTGTAGGTAG  
TGCTGGCCAT TGCTCAGAAC TTTGTGTGAG TTGAGCCAG GCTCTGGT GCAGGACTCG TGAATGGAGC AGTTCTGAGA  
ACCACCTTT TGCTAAGGGA GCTTNGGAGC CACATGGCTG CTCCCTTCAC ACTGGGTAAC AGTGTAGTAT CCTGTGAGAG  
AATAAACGTA TTCATTTAA AAG

SEQ ID NO:1516: (Length of Sequence = 380 Nucleotides)

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TTTTGCCCTTA TTCTATCCGA TTTTTCCTT AAGCTTCTAC CTGGENATTIN CCTTTGGAAA AGTCTCTGAG GTTCCACCAA  
 AATATGGAAC TINATTTTGG ACACCTTTGAC GAAAGAGATA AGACATCCAG GAACATGCGA GGCTCCCGGA TGAATGGNTT  
 GCCTAGCCCC ACTCACAGCG CCCACTGTAG CTTCTACCGA ACCAGAACCT TGCAGGCACT GAGGTAATGA GAAGAAAGCC  
 AAGAAGGTAC GTTCTACCG CAATGGGGAC CGCTACTTCA AGGGGATTGT GTACGCTGTG TCCTCTGACC GTTTTCGCAG  
 CTTTACGCC TTGCTGGCTG ANCTGACGNG ATCTCTNTCT GACAACATCA ACCTGCCTCA

SEQ ID NO:1517: (Length of Sequence = 411 Nucleotides)

TGAGCAAAAC ACAGAGGACT GCACCTCTAG TGGCTCGTAA TGAGAAAGAA GATGGTCTCA AACCTGAGAA AGATAATGTG  
 GAGTGGACCT CIGTTGTCTC AGTATTAACA GTCCCTTCTA GGAAGTAGGT AGCATTCTG AAAATAGAGT GAAGCAATTG  
 ACTGATGGAT TTAATCTTAA AACTGCTTAG GTAACCATCA ATCTGTAATG AGCTTAATAC TCTTAAGTAG GTGCTATTTT  
 NCATGTGTGC TACTTTGCCA GTGATAAAGG ATTACGAAAA ATTCTTTACC AGAGGAAAAA AAAAAATTGA ATGACCTTTC  
 TIGGGAAGGT GGTCCCTTGT TTGTGATCAA ACTTTGACAA GAACCTGGTAA TTAATTTCTT CTAAGGAATT NACCGTTCTC  
 ATAGTGTGTT T

SEQ ID NO:1518: (Length of Sequence = 388 Nucleotides)

GGTGGGCAGC TTCTCTCTGC AGCTGCTCTC CCATCATCTG GCTGAATATG GGGCTTTNAT GGGCCTCAGG GGAGGAAGTG  
 TGTCNAAAT GGTCCGTGGG CAAACATGGG CGGGCCTGGA AAAGGCACCA CAAGTTCCCA CCCAGTCAG TAGGATCAGC  
 AGTCTGACAC CCAGGCTTCA GGCCCTCCCC GACTTGAAGG TGGTGCTTCA CCAAGGACTC ACCACTCTCT GCCCAGGAGC  
 TTGTNGCCT CTGCTGCCA TTTATGGTGC CCAGGCTGTT TGTNCCAAGG AGTGTCTGTG GGCCAGCCTT GAGCTGCCCT  
 CAGCACCCCC TTGGCCTCTT TTCTGINTCT ATTGGTGCCC AAAGTCCGCA GCAGGCTGAA GTGGCAGG

SEQ ID NO:1519: (Length of Sequence = 358 Nucleotides)

TTGGTTAAGA CCAAAGTCAG ATCACTCCCT CCTAGCTCCA AACCTGCAGT GGCTCCCAAT TCINTCAGCA TACAAACCCA  
 GATCCTCAGG CTGCCATTIN TGGGCTGAAT CCTGTCCCTG CTGTCTGATC CCACCAGACA TAATGGAGGC CTGAGGTTC  
 CTGAACACTC CTAGTTTAGC CTTAAGTTAA GTATTTGCAC ATGCTGGTTC CTATGCCTGA GATAATGTTT CACATTINAT  
 CCCATTGCTT GCCAGAAATA GAAACCCCTC CACATAATTN CAAAACAGAG TTTACANCAC AGAGCTTTGG GTGACTGCAG  
 GCCTCCAAGA ANGGNAGGCA GAAGGGGCAC TGAAGAGT

SEQ ID NO:1520: (Length of Sequence = 379 Nucleotides)

CCAGAGTTAA ATATGCCAG GCTGAAAGAA GGTGTATAAT GTATGGNCGT NCTTATACCA AATGATTCTT TTGGAATTAA  
 AACAAATATG TTAGTATTT TATTCCTAAT TTAGGAAGAA AAAGCAACTA AAGTTGINTT GACATTGTAC ACAGATGAGT  
 AGCACGTAACT TTTTATTTAG TAAGCCCCAT AGGATAGTAN GGNATAAAG TTGTTAGTGA GCAAAACAGG AGTATCCTGC  
 CATTTGCTTT AATTCTNCTT GTGATAGTTT TGAGGGTACA ATAATTCCTG TGTGCGTGTG ACTCAAGCAA ACCAGAAAGT  
 GTCTTTTGTA AATACGCATT TTGGGCCTCA TCCTCATGGA GGTCCCGTT GTTGTGAG

SEQ ID NO:1521: (Length of Sequence = 339 Nucleotides)

GGGACAGGAA GCCTCTTGGG TTGGACTCAG ACTCAGGAGG TGAACAAGC CTCAAGCTCA GAAGCCCTCT GTNACCATCT  
 GTTGAATCAG AAGCATGCCC ACCATCCCAT GCAGTGCCCT TCCAGGCACT GTCCGTGAGC AGACGGAGTT CAGGCTTTGG  
 AAGTAGACAG ACCTGGGTTT AAATCACAGC TCCGCTTCTT CCGCTGAAG CTCCATAACC TAGGATAAAG TCCTAAGCC  
 TNOCCAAGTC TCAGATTCTT TACCTCTAAG GTGAANGGAT TGGTTCCAC TTTACTTCCC CCTTTTCCC TTTAGGAGT  
 CTGCATCCTC NTTTGCTTG

SEQ ID NO:1522: (Length of Sequence = 405 Nucleotides)

GTTGAATTCA AGCAATTGTT AATGGGGACC AACAGGGCTG CATTAGAAA ACCACTTTNN ACTGATCTCT CCCCCACATA  
TTTTTAATTT GTCTTGCTTT GTTTATTTTG GTTATGCAAG TCCTTTCTCT TCATGAAACA AGTGTAAAGC TCTAAGGCTA  
AAATAATAGT TATTTTGTG GGGCCCAAT AGCTACTTTT GAATTTCTTT CTTAGTATA TCTCAAATCT GGGGAACATG  
GAACTTGAAG ACTCCTAACC ATGAAGCATT TGGAAAAATA CATATCATT CTTTTTACA GAACCATTTT CTTAAAAATA  
AGGGGGCAAT ATCCAGATTC ACATGCATGT TCATAAATAA AGCTTTGGTT TAAAAACAAA TCCACACCAG CAATTATTTT  
CAGCT

SEQ ID NO:1523: (Length of Sequence = 284 Nucleotides)

AGNTCACAGA ACTCCAATTC TTTATTAATC ACAGCTTGCT CACAATGACA TACAGGAAAA TAGCACTAAT GAAGNGTAAA  
TATGCAGGCA GCAACCTTCA GGAGTTGGGA GTTGGGGAGA AACGCTTCA AAAGTGGAT AGGTACTTAT GGTGGGTATC  
TGGTGATTCT NAGTTGGCAC AAATGCCCTG CCTAGCCCCC TTAAGTGGT CACTTTTACA GATGGNGTGT TTTGTGTGTG  
GTGTGTGTAG TAGGCAGGAT TGCTTACAC TGGGAAGAA AGAC

SEQ ID NO:1524: (Length of Sequence = 299 Nucleotides)

GTGCTGTAC GTGACAGTT TGCTGATCA CATTTTAGGA AGATGATGCT GTCTTNCCT CTTAAGTATT TATTTTATC  
AGTCAAGTGA TAGGAAGTTC AATTTCAAGT ACAAGACATT TGGATCAAGA AGTGACTATT ATTTATTTAT TTNAGATGGA  
GTCTGCTCT GTTGGCCAAG CTGGAGTGA GTGGTGTGAT CTCAGCTCAC TGCAACTTCC TCCTCTGGG TTCAAGCAAT  
TCCTCTGCT CAGACTCCCG AGTAGCTGGA ATTTACAGGC ACCCAACGGG ACCAGTGAA

SEQ ID NO:1525: (Length of Sequence = 398 Nucleotides)

GGCCATGAAG CAGCTCTGT GGATTGGAGT CTCATGCCCTG CAGCTCTCCC ATACTGGAGT TGCATGCTGG TGGTCTTACA  
GTGCTGGTGT CTGGGCAGTG GCTTCACTCC CATGGCTCCA GGAGGCATTG CCCTGGTGGG GGATCTCTGT GGTGGCTCTG  
TCCCTGTAC AAGTTTCTGC CTGGGCTTCC AGGCTGTCCA TGATATCCTT TGAAATCTAA TTGGAGGCTG GCATGACCCC  
ATGGCTTCCA CACTCTGTGC ACCTGCAGAA TCAGACCAT GTGGACACTG CCAAGACCTA CCTACCACTT GTCTCTCTG  
GAGCAGCAGC ACAAGCTACA TCTGGGGCTG CTGAGCCAT GGCTGGGGCT NCCAAGGAGC AGAGTCTGA GGTGGGCC

SEQ ID NO:1526: (Length of Sequence = 318 Nucleotides)

GTCTCTCTCT ACTGCACCAT GATGCCCTTA AAAAGAATCT AGGGGCTGGG CACAGTGGCT CACGCCNTA ACCCAGCACT  
TTGGGAGGAG TTCCTTGAG CTCAGGAGCT CGAGACCAGC CTAGGCAACA TAGTGAGACC CCGTNTCCA CTAAAAATGA  
AAGCAAATTA GCTGGGTATG GTGGTCCATG TCTGTACTGT GGTCTAAGCT ACTCGGAAG TTGAAGCAGG AGGNTCACTT  
GAGCCAGAA GGTCAAGCT GTAGTGAGCC ATGATINTGC CACTGCATT CAGCCTGGG AACACAGTNA GACCTGT

SEQ ID NO:1527: (Length of Sequence = 313 Nucleotides)

TTGGCTAGAA GGGAGGCTGG AGCCTTTCAT GTGGCTTTT GAATGCCATG GTGAATAGTT TGTCTTTAT TTGTNATTGA  
ATAGCAATTT GTACACTTCT GAGCTATTAG AGTGAAATGA TTAAGCCTGT GGTTTAGGAA GAAAGAGCCT ATTAGGGAGA  
TAAATCTTTC CCTAGTTGTA GGAAGGGTTG GAACAGTATG ATATGGAGAG GGTAGTAATG AATGANGGAA TNGAAACGA  
GAATAATTT AATGATACTG GAGGTGCACT ATACAAGTTG NGCAGTAGGT TTATGTCTAG GAAGATAAGA AGT

SEQ ID NO:1528: (Length of Sequence = 405 Nucleotides)

GCGGTGCTA CCGCCCGC CACCGCCACC GCGCGAGT GCTGTCTCTA TGGCGAGGAG GAGGAGGAG AGCGCGAGTC  
AGCGACACAA GTACATAAAT AAAGGATAAA ATATTTTATG AAACAAATCT TCAATCAAGT ATAACATTTT GATGCTTGGC



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ATCTAGACTC CCTTGTGCCC TCACTATGCC AGCGGAACTG TAGATCATAG CCAAAGAATT TGTGAAGTTT GGGCTTGCAA  
 CTGTGGATGAA GAGATGAAGA AAATTCGTCA AGTTATCCGA AAATATAATT ACGTTGCTAT GGACACCGAG TTTCCAGGTG  
 TGGTTGCAAG ACCCATTGGA GAATTCAGGA GCAAINCTGA CTATCAATAC CAACTATTTC GGTGTAATGT AGACTTGTTA  
 AAGAT

SEQ ID NO:1529: (Length of Sequence = 241 Nucleotides)

GAAGGAGAAA CACTTCTTGC CTCCATAATT CAGACAGTAA ACTGATCGCT GAGATTGAAG TTTGCTTGTT TCCTGGGGAA  
 GCTTNAAGAT CCTCGTGGGA CCACCATCCC CTGCTCAGTC CTCCCTGGAA GGGGGCACTG GCTGGGTATG AGCCGCGTCA  
 CCGTTGGGTT TGTAACTTTN TGGATGGTGC CTGENTTCA CCTGGGGCTG GCTGAGGAAA GGGGAGGCGG TAGNGTCTG  
 C

SEQ ID NO:1530: (Length of Sequence = 356 Nucleotides)

GGTCTCATGC AAGGGTTTCC CATGCCTGTA AGTGTGTTTG TAATCCCACA TGTATCAGGT GCCTGGCTGC TCTGGGACTT  
 GCAGTAATTG TCTCTTGTTT GTTTCAGGTG TGATCCCTG GGCCTGTTG TTGTGGGGG AGAAGACTTA GACCCCTTTG  
 GGTGAGTACT GCTGGGGAGG TGGCAGCAAC ACAACTTGCT TTINTGGCTT TINAGCCCCA GCTCATCTTC TAATTNAGA  
 GTTTTCGGTC AGTCTCTTCC TTTGGNGTN GAGGAGGCAG TTGTTTGCTG AGCAGCTGAG AAAGCACTGC CACATACGCT  
 GGCCCTCCA CACCTAGAGC GGTGCAGGAG AGCACT

SEQ ID NO:1531: (Length of Sequence = 379 Nucleotides)

CCAACAGATG CTGCTACGTT TCCTTCAAAA TTGTTAAACA TCTCTTGGCG AGAAGCTGC TTAGTTATAT CCAGCGATTG  
 GTTCAAATCC ACGTTGATAC AATGAAGGGT GGGGTATCTA GCAGGATGTC TAGTTCACGC ACTGGGTGAA AAACAACCAG  
 AGCTGCAGAT AAGTGAACGA GATGTTCTCT GTGTTTCAGAT TGCTGGACTT TGTCATGATC TCGGTCATGG GCCATTTTCT  
 CACATGTTTG ATGGACGATT TTATTCACCT TGCTCGCCCG GAGGTGAAAT GGACGCATGA ACAAGGCTCA GTTATGATGT  
 TTGAGCACCT TATTTAATTC TAATGGGATT AAGCCTGTCA TGGACAATA TGGGTCTCA

SEQ ID NO:1532: (Length of Sequence = 307 Nucleotides)

GATAAACTTG AGCCACCAAG AAGTGGACTC TGCCTAGGAA GACAGTTTGC TGAAGTTAGA AAGTACTGGT CTAGGAACCA  
 GAAAACCTGA TTCTNCCAA GAGTTAGAAT TGINAGINAG TTCTTNTGG TTTTINAGTTT CCTTATCTGT AAAATAATTA  
 CCCAGTTCAA TTGGATAATC TCTATGATCC CTTCCACATT CTGCATACIT GGATATCTAC TGTTTCTAAA TATTTTGGCA  
 TTCTTTATAA AGCCCTTTCA CATTTNCTTT ATTATTTTTC CCTCACAAGA ATTCTTGAAA TAGGATA

SEQ ID NO:1533: (Length of Sequence = 337 Nucleotides)

ATGGCTTTAT TTGCTGATTG AGAAGTGGTC CAGCCGTGGG CTAGCAGTCA TTTACATATC AGTGACCAA TGCAACATA  
 CCGTACTAA CAGTGCTTTG GTCCATGACA TACCTTTTGG ACAGCCCAA GCTGAAACGT CAACTCTATC TGGGGTACT  
 TGCITATACA AAGATGTTAC TCTAGCAATT GTTGTCTGAG GGCAAGACCN GATGATTGTC ACTAGTAGGA AGAAAGCAGA  
 AGTGATGCAG CTTACACTGC ATAGTCCCTA CCTTNTGGA TTAAATGGAA AAGTTGCTCA AACATAAACT TGTTCTTAAC  
 AAAGGTGGGT AAGANTC

SEQ ID NO:1534: (Length of Sequence = 317 Nucleotides)

ATGGGCATGT GGGTACTACG TTAAATATT TAATTATTT AAAAATAAAA TAGGAAAGAT AAAATAGCTT AAAGTGATT  
 GATGCTCTGA ATAACCTTAT GAGTGAATAG ATACTGAAAT TTGAAGTCAG TGTTTTGCAC AACAAATCAA GATTTGGAC  
 TGGACTTACT GGGTTGGGGA CTTCTTAGGG ATAACGGTGG TGCTATGAGC ATGCTGAAA GATGAGAAGC AAAAGCCTGG

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AATTGGGAGT CCTGTACTGT CTTTAGGGTA TGCAAAGAGG CTCCTTCTTT TCTAGGTGTT CATCAGTACA ATATGAC

SEQ ID NO:1535: (Length of Sequence = 323 Nucleotides)

ATATTACATT GATGTCAGTC TTAAAGATG GAGTAGGACT TTNCAGGCAG CAACGAAAGG GAAGGACATT TCAGAAGCAG  
AAATACCATT TGTAAAGGA TGACAGCCAA GAAATATTAA AGCATATTTG GAAAGTATTG AAAATCTCTG TGTGGCTAGA  
ACTTTAGATG AAGAATCAGA TACATCTGGA GAAGGAGATT NAACCGATG ATCATAAAGA ACATTTIATT TAGGCCATGG  
TAAGGCTTGG GCACTNTGGA GCCCATGAAG GTTTTGGAC AAGGGAGTTT CCTTAGGGAG GAGTATNAAG CCATAAACCA  
AAT

SEQ ID NO:1536: (Length of Sequence = 305 Nucleotides)

AACCACATTT TTAGTCATC TNCTCCAGC TGGATTCCAA CATGCTGGCC CGGAGCGTGG CTGGCTGGAA GCAACTCCAA  
CAGGTTTTTC CCTTCCCGT CATGTACATT ATTTATTTTT GATCCTACTC ACTGTCCCAA GTCCAGAGGC AGTTACAAA  
AACACTCTTG ATGCAACCG TGAGTGGCTA CAACACAGG ATGGGGGTGG GCGCGATTCC CACAACAGGG AGTGGGAATCC  
GGGAAGATG ATATATAGGG GCAAGACGGC CCCTTACTTT GCTAAGAGTA TATGGGAGCT CAAA

SEQ ID NO:1537: (Length of Sequence = 279 Nucleotides)

GGTGGCAGCG GCGGCGCGC GACTGAAGCG CGGAAAAGC TGAGGCGGCA ACGTCGGGA CGGCTGCNCG GGACGGCTCT  
GTAGGAAGGA ACTTGGTTCC CCTTCCCTCA GCTTCCGCC CAAAGATTC AGAATGGACA GTTTAGAAGA ACCTCAGAA  
AAAGTCTTTA AGGCTCGAAA AACGATGAGA GTNAGINATC GTCAGCAACT TGAAGCAGTG TACAAGGTCA AAGAAGAACT  
NTTGAAACT TGATGTCAAG CTGTAAATN GCAACCATG

SEQ ID NO:1538: (Length of Sequence = 310 Nucleotides)

ATATTTCCTT CTGCTCTGAC TCCGGAAGAA CTGCACTGT TGCCTAGGCT GATAATCCCC GAAAAAAGT AACAAATGCA  
ATTNTACCCC CCACCCCAT ATACAGCCCT CATATATATA TATGAGAGAG AGAGAGGAAA AGATCATGAG ACATGTCTTC  
TAGGGAAAAA AAATTCTAAC TTCCCTAGCC ACTGTAGTCA TTTGAAACCT GAGTTAGACT ATGAGTTAGG AAGTATTTTC  
ATAGAGITCA ATTAATATAT TTCIGCTCTA TGCATGGATG CTAACAGGTT TAAGGAAACA CAAAGCCAA

SEQ ID NO:1539: (Length of Sequence = 267 Nucleotides)

GAGATTTTAC TTGTAAATCG AGTAATTTAG CCACACTCTT GTGAGGGAAC AAGCCAGAGC CAGGACCGCA TATTACCCGG  
TAAAGCTGCA GAGAAGACTT GAGACTTGTA AGATTGGNCC NGGCTGCACT CCGTGGTCA GTAACATCTG CAACATTATA  
CAGCCAGCAG ATCAGCTCTT CCAGCTGACA GCAAATGTC TTCACACATT GCACCAGTGA TTCTTTTCCC TGINTCCTC  
CTTCTCTGGG GAAGCTGCC TTAACA

SEQ ID NO:1540: (Length of Sequence = 354 Nucleotides)

ATTTATTTCAG ATGAAAAAA ATCAAGGCTT AATTAAAGTA ACTGTGCCAA GGTCAAGGAG TTGACAAGTG GCTGAGCTGG  
AGTTGAGCAT CTCAGACATC TTCCTTGAA TCCTTGCTT CCTGTGAAT TTCAGATGAC GGAGCATGAC GGCTGCATGA  
TTATGGGGTC ACCGGGCTG TCCTGGGCT GAGGGACCAA GGATCAGAAA GGGCAAGAAC CAACTGCTC AGCTAGTGAA  
AGTGCAATTG GAACTGATC CTGTTCCGG GNTAACCTT CCGCTGGCC TTTAAGAGGG NTTCTTGAA TCCACCAAGG  
GGGCTAGAG GAAGCAAGCA AACINCTGG AACT

SEQ ID NO:1541: (Length of Sequence = 403 Nucleotides)

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GTGATGTTAT ATCAGGTAAA ACCTGTCTAA GGAGAATAGA CAGTAGTTAG TTCAACTTAC TCATTACGTA TTAGGAAGAT  
 TAACCTGGTT ATCATTGTTT TATACATATA TATATGNAAT ATATATGAGT ATTCTGTATAA ATATAATACT TTTACCTTGT  
 TTATGTATTT ACTCAATATT CTCCTTTTCC TCTAAAATAA TCTGAAGTGA CTATTATCAA TAAGTTTACT ATGCCAAAAT  
 TCATTAATTG CCTTTCACCT AACTTTTGGG GCCATAATAA ATAATAAAAT GTATTGCCAT AACATTAATA AACTACCTTA  
 CAAAACCACC AATTAAAATC AAACAACCAA AAAGGTGTTA TTTACATCTG NNCACATAAA TCTACTAAAA ATACAGGGTT  
 CAT

SEQ ID NO:1542: (Length of Sequence = 333 Nucleotides)

CTGGTACATG ANTTTATAAA AACATGTCAC GCGCGGCTCT GTGGCTCATG CCTGTAATCC CAGCACTTTG GAAGGCCGAG  
 GCGGGCGGNT CACAAGGTCA GGAGATCGAG ACCATCTCTG CTAAAACGGT GAAACCCGTC TCTACTAAAA ATACAAAAAA  
 TTAGCCGGGC GTGGTGGTGG GCGCCTGTAG TCCAGCTAC TCTGGAAGCT GAGGCAGGAG AATGGCATGA ACCCGAAGG  
 CGGAGTTTTC AGTGAGCAGA GATCATGCCA CTGCACTNCA GCCTGGGTGA CAGAGCAGAG CGGGGACTCC GGAGCAATGG  
 GNAGTACAAT CCT

SEQ ID NO:1543: (Length of Sequence = 329 Nucleotides)

CCCTGATAA ACCTATCAGA TTCTGTGAGA CTTATTCATT GTCATTAGA ATAGCAGGGG AAAGACTGGC CCCCATGATT  
 CAATTACCTC CCGCTGCATC CTTCCACAA CATGTGGGAA TTGTGGGAGA TACAATTCAA GTTGAAATTT GGGAGGCGGC  
 ACAGCTGAAC CATATCAGTC TGTATTATCT CTCCTTTTCT CTGCTTTAAG NGACTATACG NAGGTGTTGT TTTAGGGNT  
 TATACATAGG TATTCTGAAA GATGGGGTTA TTTTCTGTTT CANACTTTGA CTAAGTGGCT TCTTTTGTCC CCTATGTGCC  
 AGAATAGCC

SEQ ID NO:1544: (Length of Sequence = 313 Nucleotides)

CGGAGATCCG TGATGTAACA AGGATGANC GAATCGGTGC CCACTCCAC ATCCGGGGAC TGGGGCTGGA CGATGCCTTG  
 GAGCCTCGGC AGGCTTCGCA AGGCATGGTG GGTCACTGCG CGGCACGGCG GCGGGCTGCG GTGGTGCTGG AGATGATCCG  
 GGAAGGGAAG ATTGCCGGTC GGGCAGTCTT TATTGCTGGC CAGCCGGGCA CGGGGAAGAC GGCCATCGCC ATGGGCATGG  
 CGCAGGCCCT NGGCCCTGAC ACGCCATTCA CAGCCATCGC CGGCAGTNA ATCTTCTCCC TGGAGATGAG CAA

SEQ ID NO:1545: (Length of Sequence = 384 Nucleotides)

CCCAAACCT GGAGCTAAGA ACTTCATCTC ACTTTTGACA CCCCAGCCCC CAAAATATGG AAGCCCAGGA GAGCCAGGAG  
 AATTTATAGC AGAGGCTTAA AGAGAAAGTT ATGATTGTGT TAAAGTAGAG AATAAGGTGA AAAATAAAC CTGGTACTCT  
 GTCGGAAGT CCTGGAAGTC TCCTTGCCCA ACCTCACTG GCCTGTGGGC TCCTGTNTCC TTGCTCTGGG ATGCCATGGT  
 GAATGTGAAA ACAGGGGAGG TTGTGTGTGG GGGTGGGAAT GGCCINTCGG TTGCAAGGCG AGTCCTTTGC TGAGCCAGC  
 CTGAGACCCA GCTTATGGGC TTTATCCAGG TGAGAAAATN CTGGGGACAT GTGTTGAGG TTTA

SEQ ID NO:1546: (Length of Sequence = 345 Nucleotides)

TTTAAAGAAC AATGATTAAG TGAAAATNCT CTCAGTTTTT TTTAATTGGT TCAGCAATTG ATTAATTACT GAATCTTGAC  
 CCTAAACTTT TTAGCTAGA AATGTGCTTG AGGAATACAG GCTGGAGATC AGCTTTTGA CATTCATTTC CCTCTCTGNN  
 TCACATCCAT GTTGAATCA ATTTATAAAC TGCCCTTCTA AGGCTTAAAA TGATGGTGAT CTACAGACAA GTGCCCTTCT  
 AGGCACAGGG TTGCTGGAGA CTGATGCCAG GCCCATGGCT CTAAAGCGA ACACTGAACT CATGGCAGAA ATGGTGGAAA  
 GTAGAGAAAT GAATAGAGGG GGGAA

SEQ ID NO:1547: (Length of Sequence = 342 Nucleotides)

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GGAGGCTGAG GTGGGAGGNT CACTTGAGCC TGGGAGGTTG AGGCTGCAGT GAGCTGTGAC TGCACCACTA TACTACAGCC  
 TGGGAGACAG AGTGAGACCC TGTCTCATAT ATATATATAT ATATGTATGT ATATATATGT ATGTATATAT ATCTCTAATA  
 TATTAATATA TATCTAATAA ATGTATCTTA TATATAATAA ATATATCTAA TATATAATAT ATATATTNCC NAGAGAGGGA  
 GAGGCTCTTA GGAAATTATC TTCTTGCTA TTATGTTATA TTATGCTATA TTTGGCTATT TCCTAAGAGC TCTATCGTAT  
 TATTTCATT TATTGTGAG GA

SEQ ID NO:1548: (Length of Sequence = 334 Nucleotides)

GGAAATAAAG GTGACATGAA CTAACATTC AATCATGAAT GGTAGAAAAA AATGAAAATG TAACGAGATG GGATCCGGGT  
 CAAAGTCAGG GGAGGTATAG TTGAAGATAT TGAAGGAGTC ATTATGATAC CAAAGAAAAT GGAAGAAGT GGTATCCAGA  
 TAGGTTATCC TTGGAGAGTA TCCNGGGATG TCTCTTTTCC TAAGACCTTA GAGAAGGAAA GGATGGCTGA TAATATAGGG  
 AAAAGTTGAC ATGGAAGGAT TAAATAATTT TTTTGAGGAA TTCACGTAAG GNATGATAAT CTGAATTTTC AGGGCTAGGC  
 TCAGAAGCAG GAAT

SEQ ID NO:1549: (Length of Sequence = 362 Nucleotides)

AGGATTCTGG GGGCTTAGAG AGGGCAGCCT GGAGAAGCCA GAGTTAAGCT CAGAACAAGA GGTGCAGGAA GAGCCACAGC  
 AGGGAAGGGA AGAGAGATCC CAGAGGAGGG GCAGAGTNTG GCAGGACAAG GGCCCTGCGG TACATGCTAT GCATGAAGGA  
 AAATCTTGAG ACTAAGACTC ATGAAAAGNT CAAAATAAT TATTTCTGTG GGGCCCTAGA AGACTNAAGA GACATTINCT  
 TCGCCATTG CCCAGGGCTG CCTGGGCAGG AGACAAAGGA ATNAAAAGTC CAGGGGGAAA GCAAAAATCT ATGGGCTTCT  
 GAACACATGC TTCCCGGAGC TCGTCINCAC AGCATCTTCA CC

SEQ ID NO:1550: (Length of Sequence = 328 Nucleotides)

GGACTAATTA ACTAAGAGG TTTTGTACAG CAAAGGAAAC TGTCAACAGA GTAAACAGAC CTACAGAATG GGAGAAAATA  
 TTCACAACT ATGCACCCAA CAAAGCTCTA ATATCCAGAA TCTATAAGAA ACTTAAACCA TTGAACAACC AAAAAACAA  
 CAACCCCATT AAAAGTGGAC AAAAGTCATG AACTGACACT TCTCAAAAAA AAGACATACA AGCAGCCAAC AAGCATATAA  
 AAAATGCTTG ATATCATTA TATCAGATG AATGCAAATC AAAACCACC AAGTCTTTT CTCTGTCTA GGNATTTTA  
 TTTTAGGG

SEQ ID NO:1551: (Length of Sequence = 365 Nucleotides)

CAGGAATTTA CATGGGGAGA CCTACCTATG GCAGCTCTCG CGTCGGGAT TACTATGACA GAGGATATGA TCGGGGCTAT  
 GATGATCGGG ACTACTATAG CAGATCATAC AGAGGAGGAG GTGGAGGAGG AGGAGGATGG AGAGCTGCCC AAGACAGGGA  
 TCAGATTAT AGAAGGCGGT CACCTTCTCC TTACTATAGT CGTGGAGGAT ACAGATCAG TTCCAGATCT CGATCATACT  
 CACCTGCTG CTATTAAAGC ATGAAGACTT TCTGAAACCT GCCCTAGAGC TGGGATATTG TTTGTGGGGC AATATTTTIN  
 ATTGTCTCTT GTTAAAAAG TGAACAGTGC CTAGTGAAGT TAGGT

SEQ ID NO:1552: (Length of Sequence = 330 Nucleotides)

GATCCAAAAA AATTACTGA AATAGCAAAA ACGTGGACTT TGGGATTTC TCTAAGTCT GCAAATTATA ACACAGAATT  
 GCTCAGTGT AATACTTGAN TTGTGGGGCC AAGTCTTCTG GCTGCCCTAG TTCTCTTTTC TGGCATTGTA AAGCCCTTGA  
 GCTAGCTATG GAGCTAATCT TTGGACAGGC TTTTGGTTC CCAGGAATGT CATGCCTTG AATTCCAAT CTATATATAT  
 ACAGTGTGTG TGTATGTA NCTGTCTTT CACTGTAAAG CACCINCACC CATCCCTTAT AGAAGGNGGC CACAAACAAT  
 CAAGCAATC

SEQ ID NO:1553: (Length of Sequence = 304 Nucleotides)

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CCCTTGTCCTC ACAGCCATTT AAAAATCTTC TGAAGGGCCT CAGGGCACAA AGTGATCATT TGGGATCCTA AGTAAAAAG  
 GAAATGCAAG AGTAGGNTAC TCCAATTCCA GAGTCTTTC AGGAGGCTAA TCCCACAAGA AGGGTAGCAT CAGAGAAGTG  
 GGCATTGGTC TTAGTGGTGG ATCATCAGGT AGACAAGTGA TAGTGTGTGT AACCCATCTG AAATTCATTT TACCGTCACC  
 ACTCTTACAA AGGACAGTTT ATTCCCAAGG ACAGTGCTGA CGGGGAGGGG GACAGGCAGG GAGT

SEQ ID NO:1554: (Length of Sequence = 309 Nucleotides)

TGIGTTACTG ACCATGTTTT TGAGAGTAGT GCCCCTAACC ACTTTGTCTC CACTTGCATA GTGTAGTGAT TTINAGGNCT  
 CIRGATGTCA TATTATAACA GAACTGACTG TATATGGCTA TTTTATCCCA TAATCAAGCC AATTCCTCCA GAATATTACC  
 ATCAGTATTA CCACATACAT CCTCCCAAAT CTTATTTCAA AGAATAAATA TATAGTCACT CATGGTTTTT AAGNAAACCC  
 AAAACTACTC AACCAAAACC TTGAGGAAGG TTTTCCAGG GNTTCTACC TTAATTATTC ATAATGATT

SEQ ID NO:1555: (Length of Sequence = 326 Nucleotides)

GTTTAAAAAC TGTCCAAATG TCATTTTAAT TTATGAAGGC ACCCAGAATA AGTNCATAAT TCATACTGCC CCAATATATT  
 TNCIGAAGCC AATTCCTCTCT TTTATTAATT TTTACTGAAA ATAGCACITT TTTCCTCCCC CTGATAGTAC TGGGTAATGT  
 TAGAATGICC TCTAAAATTC TTTGGACCTT ATTTACATTC TCAAGAGNIT TTTTAAATTT TACCAATAAG ATGTGCTATT  
 TGAGGAATTA GACTTTAGTT CAGTTGTACA TGGNTATGT CTGCTCATAT CATTCAATGC TGAGNCTTTC ATTTTATTAA  
 TATGGG

SEQ ID NO:1556: (Length of Sequence = 375 Nucleotides)

CCCATCCCTG TTTAGGTGCT TTGTCTCTCT TGAGGAGCCT CCAATGCTGC TGCTCCTATA CATGTCACAA TTTCAGACCC  
 AGCATGCTAG GAACTGCTGC CAGCGCCTGG TTAAGCCAAT ACTAAATGGG GCCAAACAGG TGAACAGACA TTCTGTCTTT  
 CTCCAAACCT CTGAAAAAGA TTCTGCAACT CATCTCACAG TAATTTGTTC CTAATTAC TCTTAGGAAA TTGTGTTAA  
 AGTCTGATTA GGTAAAGTCC AATTCCCTGT AATTAGGATC CTCAGTGAAG AAAAATCTAC CCATCACCAC AATTTATTTT  
 CTTTTCTATA GCTCCAGCAT CAGTAATTGT ACCATTATTT TTGGCAGCTC TGGGG

SEQ ID NO:1557: (Length of Sequence = 306 Nucleotides)

AATTCCGAAG ACTATTCTTA TACATTAGAG TGAATTNAG ACTATCTCCA TCATTCTCCA GCCATTCTTC AGTGGGAAAA  
 AAACGGTGGG AATTAACTAG TGGAAACAAG GCTTTCTCAT CTAGTCCCAA TCCAGTCGAT AAGCTGTGTT TNCCAATCAC  
 TGCTCCAGCA CAATGGCCCT CAGTTTATTT TTAAGTCTAT GGCATGCCTG AAGGACCATG TTCCCATGAG TGACACCTTT  
 CTGTAAATGT GGTGGCACAT TATGGGCTGC TGTTTTAGAA GGGACTGACA ACTTGCTGGG GGTAT

SEQ ID NO:1558: (Length of Sequence = 292 Nucleotides)

AATTCCCCCT TTCCAAATGT ATTTTCAATC CCTTGAGTGT CTAGGCTTCC TGCTTTTAAG GCCTNCCTTC TAACCCAGGG  
 TTGCCCATTT CACCTTAAAA CATTTTTCAA TAACCCAGAA AAAACCAGGN TGAACATACC CAAGCTCCGG AACCCAGAAA  
 TMTGTTCGA ACCCGCTGA TGAATCCAG GGAAGCCAA GAGGACAAAG ACAAGGATGA GGACGAGGAC CCAGGGACCG  
 NTGGTGAATG GCAACTGCTG TCAACTTCAC TTTTCAACCT CAGNCAGTTT GT

SEQ ID NO:1559: (Length of Sequence = 246 Nucleotides)

GTGATGCTT CTCAGCCCAA CAAGAGTGAT CCTTTTAAGG TOCACACAG CTGCCTCTCC TGGTCCCAA TGAGCCTCTG  
 GCATGGTCTT TCCTCCAGCT GGCCCGGGG TGGGCAGAGC CTCCTCTGCG CGGGGCCCCC GCCCACCOCCT TCCTTTGCTT  
 GGAGTNAGGG TGTTTCATACC AAAGACGGAA CCATTTGCGC TTAAAGAAA ATATATNCAG AAGCAGCCGC TGCCTCGNAG  
 CCTGG

SEQ ID NO:1560: (Length of Sequence = 383 Nucleotides)

CCAAAGGTAC AACAGATTTA CTACATTAA GACAGGAATC TTTCTAATC TCTGTGCCTA TTAAAGAAGC CACCTGCTTA  
GAAGTACTTT GTAGATGAAA AAATACTTAT GAATCCACTG TAACTTCACA ATCTTGAATG CCAAGGAAAA ACTTTACTAG  
TTTCATTAC CACTATTCTT TAAAGTCTT TTTGATTITA TGTTTTAAAT TTTTAAATTT TATAATTTGA GACAAGGTCT  
TGCTCTGTG CCCAGGCTGC GGGGCACTGG CATAAACGTG GCTCACTGTC ACTTTGACCT CCTGGGCTCA AGGAATCCTC  
CCATCTTAGN CTCTGAGCA AACTGGGNC ACAGGCATGC ACCATCATGN CCAGCTAATT TTT

SEQ ID NO:1561: (Length of Sequence = 313 Nucleotides)

CCCCCTCCAC CGCAGTCTGT GCCCCGTCC CCACCACCAC CTTCCTCAAC CACTTACAAC TGCCCCAAGT CCCCACCTCC  
AAGAGTCTAC GGGAGGATTA AGCCTGCGTT CAATCAGAAT TCTGCCGACA AGGTGTCCCC CGCCACCAGG TCCGACACCG  
TGGCCACCAT GATGAGGGAG AAGGGGATGT ACTTCAGGAG AGAGCTGGAC CGCTACTCCT TGGACTCTGA AGANCTCTAC  
AGTOGGAATT NCGGCCCGAA GNCAACTTTC GNAACAAGAG AGGGCAGATG NCAGAAAACC CATACTCAGA GGT

SEQ ID NO:1562: (Length of Sequence = 320 Nucleotides)

AAACGGGCGC CGAACCGCAG TATCATGCTG GCCAAGAAGA TCATCATTA GGAACGAGGC ACGCCTCAAG GAATAGGTTT  
TCTAGTGTG TATCAGCAG TTATGTCAT CTTTTTGAG TTTTTTGCTT GGGGACTATT GACAGCACC ACCTTGGTGG  
TATTACATGA AACCTTTCCT AACATACAG TGTGTAACAG TTCTAATACA GCAAATTAA TACAATTTT TATTAGATCA  
AAATCAATA GAATGTTTCA TATGTTTAA GGAAGGTTCA TTGAATTTCT TCTTTTCAAT GGAAGTCTTC ATTTGGAAAA

SEQ ID NO:1563: (Length of Sequence = 299 Nucleotides)

GCACAAGCAT GACCTGAACC TGTCACTGCG CGTINAGTAT TTCACATTC TATAGTTTTT TGTGATTCTG CCTGCATTTA  
ATCATCATCA CCAACAAAA TAGTTCCTCT GAAGAATTAT TTTATACTAG GATTCTCAGG NTATCTCCTC TCAATCTCTA  
TIGGGATCAC TCACTCTGA CTGTACACT CATTTCCTCA CTGATGTAGC TGTCTCAAG TTAGAAGTTA AGTCTCAGT  
CTTCATTTA TCAGTCATCT CAGCAGCAIT CATTATGGTT CAGGCACTCC CTCTATTT

SEQ ID NO:1564: (Length of Sequence = 325 Nucleotides)

CAGATGGNTC AGTTCATACT CTGGCAGTTA ATTTTATTTT CTCTAAATAA AAATGGACAG GTTAATTTAT TAAGCAGCTG  
TGTATCAAT ATGGTACGTG TGTGNCCTG TATAGATAGA TGTATATGTA CATACTAAC TATACATTTT NCTGGACACA  
TAATATTNA GTTGCTTAT GTATGCTAGA CACTGTCTA CCATCAGTAA AAAAGCACTG CCTGTTTTA CTGTGATTA  
AAAACAAAT TCTGAAAATA GTGANCAATG AGGCTTACAA CATTGTGTAC AGGNTAAGGN ATCTCAATTT AGGAAAATGT  
TGTC

SEQ ID NO:1565: (Length of Sequence = 382 Nucleotides)

TTTTTTTTTA TATAGTGCC TGCTTTTAA AAGTTATTT TACATTTAA ATACAGTATT TTTCTATAA AAAAAAATC  
CAGGAAGTGC CTAATCCAT GGTTCCTATA CCATATGTAC ATGAAAGCTG ACAGAGAGCC TGACAAATGT TCTGGATGTA  
ACAGTATGAA CACCTATGAG CTGGGACTAC TTCTGANICA AAATTAATAA ACACAAATTA AGCACTGCTT AAGAAAAA  
AAATCCAGTT TCTGAACAAC CAAAGAGAA CAGAGTAGA TATGTACAAA ACCAGGTATT AAAAANCAGN AAGGAATACA  
GCACACAAA ACTCAAACAN CCCATATGTA GTGAACGTGA TATACTGCAG TTAATGAAA CC

SEQ ID NO:1566: (Length of Sequence = 305 Nucleotides)

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GCACTGTGGC TAATTGTAGC TCAAAAGATC TGCAGAGCTC CCAGGGCGGA CAGCAGCCTC GGGTGCAATC CTGGAGCCCC  
 CCAGTGAGGG GTATACCTCA NTTACCATGT GCCAAAGCAT TATACAATA TGAAGGAAA GAGCCTGGAG ACCTTAAATT  
 CAGCAAAGGT GACATCATCA TTTTNCGAAG ACAAGTGGAT GAAAATTGGT ACCATGGGA AGTCAATGGA ATCCATGGCT  
 TTTTCCCCA CCAACTTTGT GCAGATTATT AAACCGTTAC CTCAGCCCC ANTCAGTGC AAAGC

SEQ ID NO:1567: (Length of Sequence = 292 Nucleotides)

GATTTCCTG GGAAGACAA CATCACCAGC AAATGGATGA TTGTCAACTG GGGAGCCATT GACTCTCCAC TTGATTGTG  
 GTTGAGGTT TCCTTCAGCC TCACATAACA AGATGCCATT GCTCCGGTG CTATACACAG CACTCTGAGG CTCTTTGTG  
 CAGGAGGAG GCTCTCTAC TATAACGTGA AAATCGTGAG TGGCTGTTCC CAAGAAATTG CTGGCTGTGC AGCGATAATT  
 TCCTTGTCC TGGTAGGAGA CATNCTCTAT CTCAAAGTC TTGCCATAAT TT

SEQ ID NO:1568: (Length of Sequence = 204 Nucleotides)

ACCTACTCAG GAGGCTGAGG CAGGAGAATA GCTTGAACCC AGGAAGCGGA GGTTCAGTG AGCCGAGGTC ATGCCACTGC  
 ACTCCAGCAT GGGCAATAGA GCGNGACTCT NTCCCCCGG AAAAAAGAA CAAGGGCTAA NTTCAAATCA AATTTTCCCT  
 GTACCCTAAG AANAATAATT AGNCGGGAG ATGTTTGAAT AAGT

SEQ ID NO:1569: (Length of Sequence = 362 Nucleotides)

CACAAAGCCA AGTACAGAAC CACAGAATGA AGCCGTCACA AATGTTGAAT CCCAAAACAC TAACAGGAAC AACTCGTATT  
 TCCATTAAATC AAGATTTTAG TATACCAAAT TTTCTAGTTT TTATCTCATG GAAATATAAG GGTATTTTAT CTTTTGTATG  
 CTACTGAAGG GNAACATCA TCATACAGCA ATGAATACTT CAAGGGNCTT GTTGATCTCT CTATTATTGA CAGTGGGGTG  
 TTAAGTCTC CCACTATTAT TGTTGGGNG GCTACANCNC TTTGTAGGGC TCTAAGAAGG TGTTTTATGA ATCTGGGGC  
 TCCCTTTGG GNGCATATAT AATTTAGGGT AGTTAGTTCT CC

SEQ ID NO:1570: (Length of Sequence = 262 Nucleotides)

TGCTAAATGA TAGANGACAG ATTCAAAGTT GTAGTTACTG CGTAACTTTA TTTATGAGGC ATTTTAGAAT AGGCAAACT  
 GATCINTTGT GGTAGAAGTA AGAAGTGGG TACCCTCTGG AGGAAGAGAA TTINCITTTGA AGTGGCATGA GAGGATTTT  
 TTGGCTAATG AAATTATTTT NATATCTGAG TAGGGTTGTG GGTACACAG TTTAGGCATT TTTCAAACT CATGGNACCA  
 TTCATCCAAG TCCTGTGCAT TT

SEQ ID NO:1571: (Length of Sequence = 402 Nucleotides)

TGCTAAATGA TAGAAGACAG ATTCAAAGTT GTAGTTACTG CGTAACTTTA TTTATGAGGC ATTTTAGAAT AGGCAAACT  
 GATCTGTTGT GGTAGAAGTA AGAAGTGGG TACCNCCTGG AGGAAGAGAA TTINCITTTGA AGTGGCATGA GAGGATTTGT  
 TTGGCTAATG AAATTATTTT TATATCTGAG TAGGGTTGTG GGTACACAG TTTAGGCATT TGTCAAACT CATGGAACCA  
 TTCATCCAAG TCCTGTGCAT TTTACTGTGT GAAAATTATA TCTCGACTTT TTTCAAAAAA GGAAAAATA CTTAATTATA  
 ATATAGCAAT TATGNATTAA AATAATCCN TTATGTAAAA ATATTTTATT GGNITGGTCA AGATTCATGA TTGCAACCA  
 CC

SEQ ID NO:1572: (Length of Sequence = 417 Nucleotides)

CTACCAGCCC GTTTTCACAA CTAGCAGCAA ATCCTGAASC ATCCTTGGC AACCGCAACA GCATGGTGAG CAGAGGCATG  
 ACAGGAAACA TAGGAGGACA GTTTGGCACT GGAATCAATC CTCAGATGCA GCAGAATGTA TTCCAGTATC CAGGAGCAGG  
 AATGGTCCC CAAGGTGAGG CCAACTTTGC TCATCTCTA AGCCCTGGGA GCTCCATGGT GCGATGCCA ATCCCTCCTC  
 CTCAGAGTTC TCTTCTCCAG CAACTCCAC CTGCCTCCG GGTATCAGTC ACCAGACATG AAGGCTGGC AGCAAGGAGC

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GATAGGAAAC AACAAATGTGT TCAGTCAAGC TGTCAGAAC CAGNCCACGG CTGCACAGCC AGNGTATAC AACAAATGA  
GCATCACCGT TTCCCAT

SEQ ID NO:1573: (Length of Sequence = 368 Nucleotides)

CAAATAAGTT AGAAACATGA AAAATTCCTA GAACTTTAGA TGAAAAATTA AATTTACTAC TAATACCCAC CTGCAATAAT  
TTCCCGTAGT TTGGGATCTA GGTTTACAGT GCATGGCAAA AAGACTTTTA CATCTCGAGC CACAAGAACT GGGGTCCTTG  
AAGACAAAAA CACTTCAAAA TTTCTTATAT TCOCATCAAT TTCAAGAAGT GGCTCAACAT CCTTAGTTGT TGGAAATATC  
TTTGATATTC TTTCGTAGAT GGTTTTAAAT GTCATTGAT CTGGAATACC TTCAGTCTCT TCCAAATATA ATATGAGNCA  
TGAAGTCCGG TATGGCCACT GCTCAGTAAG GTTGATCCCG CTAGCAAG

SEQ ID NO:1574: (Length of Sequence = 397 Nucleotides)

AATTTTAAGC AAATGTTATG TTTAAAGACT GTTTTGATGA AAACCTTTTAG AATTGAGTTA GTAGCAGAAT ACATAGCTAA  
ATGTAATTIN CTACAAATAG AATGAGATAT TTGATTTAAA ATATTNCTTT CCTCTTGAAA TAGGATGTTA GATAGGGACA  
TCTCATTITA CCTATCAAGT TCTGAGTCTT GCTTTAGAAC TACTTCTTTT AACTTAATIN CATGCATACA CTGGAAGACA  
ATAATATGCG TTTTAACTG CATTATCTTT AGTTGAAACT GATGGAGAAA CAAAAATACT GCTTATACCA TATTGGGTAC  
ATGCTGAATG TTTTAAAGA CTAGCCAAA CTGACATTTT TTAATAATTA ATAAGATGTT TTAGTTTCAA ATTAGAG

SEQ ID NO:1575: (Length of Sequence = 296 Nucleotides)

GGACTCAGCC TTCCCGGGCA TCTGCATGAT GATCGGTGTC AACCCGGGGG GCGTTGTGCA GGTTGGGGCA GCTGGGCTCT  
NAGGGCAGGC GCGGCNCCTG GGCTCGGGCG GCGGCTCACC TGGGATCCGT CACGTTTCAG GACITTTATTT TCTTCTTCAA  
TGNIGTAGCC TCCTGGGTGA GCGCGAAGAT NACCTTCGGG ACATGTTTTA TAAGGTGAGG CTCTGTCTGG GCGCTGATCT  
AGTTCCGGGA GCAGGCAGGA NGTGAGACCA TCTGGTAACT ATNGGGGCTN GGGATT

SEQ ID NO:1576: (Length of Sequence = 289 Nucleotides)

CTTTATGAAG TAGTAATTCC TGAGAGGTGT GCTGGCTGAA AACATAATAG GTTCTGGAAG AGCCAGGTAA ATGCCTGENT  
TTAGACATGC AGGGGTAAAT CAAAATAATT TAGGAGCGTT TTCAGCTGGT GAGCCTCATA TGGGATCTTC GAACCCGTGG  
CGAGAAGAAA ACCGGTGTIT AGGNAGCACC AGGCACAGTG CTGGAAGGG AGAGGCTNGC CGGCCAGTGT GCAGCTCAGC  
TNTTTCGAGG ACGGAACCCG CAGCCTNGCT GTNTCCAGC AGACCCAGG

SEQ ID NO:1577: (Length of Sequence = 320 Nucleotides)

CAGACTCTAC TCAGATTTCC CGCCTATGCC CCTAGGACAG AGCTGGAAGG GAAGGAGGCT GGGCTTATTT AGTCATAATG  
CCTCCCCACC AGGTCTAGCT TTCATTCATC CATGAACCT CACCAAGGG CCAAGAACTG AGTTCACTGC ACCCTGGACC  
CCTGTTGAGG TAGGAGAAGT AGACGTTGGG AGCAAGGTTT CTCTCTAAT TTINTTGCAT CCGCTCAGTG CCCAGCACAG  
CTCGGATAC AGGGCAGGTT CACAGTCAGC GTGTTCACT GGGCTGTGT ATGCACCTAA GGAAAAGNCT CAATTTTCTT

SEQ ID NO:1578: (Length of Sequence = 217 Nucleotides)

AATCAGGAGA ACTGTTAGAG CCATACCAGA GAAATCACA AGAAAGGCAG GACTGCAAAG NTCTAGTGA GGCTGTGAGA  
AAAGGTAAAC CCGTTCTTAA GCTCATCTGC CCGTTTAGT ACCACTGGCT GTCTCACTCC TGGATTATG TGAATCCCTT  
AGCTATACTT TCCANCCCC CTGGGAGTT CCGCACTAT CCGTTCACT CACAAAG

SEQ ID NO:1579: (Length of Sequence = 375 Nucleotides)



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TTGGTCTCA AGTCCTATTT TAAAATTITG TCAATTAGAG GACTCTTGGT TCCTTTGGTT GACTCATTCT CTGCTGATTT  
 GTTCTCTGTA CTTCAGCAA ATAAAGTGCA GTCATTGAGA ATGNCCTGT GTCAGTGA TGTATCAAGG GATCTTCATG  
 TTAATATCTG TTTCTCTGAC AACTGTGTTT TATACTTTGT ACTGTAGCTT TCATTGGAGA AGCCCTGGGC TCATAAGAGT  
 GATTGTGTTG GGCATTTCCT TATGGAACAT AAGCTTTTGA AATATACTTG AGGTAAATAT TCATGGGAGA CATCCAAATG  
 CAGTAATGAG AGTACAATGA AGACAGCATT TTNGACTTTG GAAACCTGAG TTCAA

SEQ ID NO:1580: (Length of Sequence = 325 Nucleotides)

TCINCTGATG CACCCATGAG AGGGGAGACA GCACTGTCGT CTCCTGCGAGT TTTCCCTTAA CACTCCCTTA TCTGCAGACT  
 TAAACTAGGA GCCCTGGCA GAGTCCTACC TCCAGATCA CAAAAGTGA GAAGGAAAGT GAGAGACATT GATTGACTTT  
 ATATCTGACT TACTAGTTTC CTAAGGCAGA GATTTTTTAG AAAACTGCCT GGCTGGCCC AGCCAGGAT AGATAGGGAT  
 GGGTAAGAAG CCCTTNAGAA TGTGGCAGTA TGTGGCTTNG ACTTCAGACT TGTCAGATTA GGGGTTTTAT AGGGGTTTTT  
 TTAGC

SEQ ID NO:1581: (Length of Sequence = 402 Nucleotides)

GCAGATCAAG AAAAGTTTC AGCCAATGAA CAAGATCGAG AGGAGCATAC TACATGATGT GGTGGAAGTG GCTGGCCTGA  
 CATCCTTCTC CTTTGGGGAA GATGATGACT GTCGCTATGT CATGNTCTTC AAAAAGGAGT TTGCACCCCTC AGATGAAGAG  
 CTAGACTCTT ACCGTCGTGG AGAGGAATGG GACCCCCAGA AGGCTGAGGA GAAGCGGAAG TTGAAAGGAG CTGGCCAGA  
 GGCAAGAGGA GGAGGCAGCC CAGCAGGGGC CTGTGGTGGT GAGCCCTGCC AGCGACTACA AGGACAAGTN CAGCCACCTC  
 ATCGGCAAGG GAGCAGCCAA AGACGAGNC CACATTCTAC AAGGCCAATA AAGACCTACG GCTTTTTTCC CNTGGCCAAT  
 AA

SEQ ID NO:1582: (Length of Sequence = 286 Nucleotides)

TCTTAGTTGA TTAACAACAA TAATTGAAAT AAAAAATTAT GTTTATNCTT ACATGTATGC CATGTAGCAC TTTAAGGAGA  
 TGAGTTTATG AAATTCATGA ATGAGAGGAT GATGTAAGTT TAAAAATCAT TATTTTAGTT GCTTTATTCT NCTATTTTAA  
 ATTCAATAAT AACACAGGTG GCCTGTATTT TGAAAAGAGC CTTTCTCTCC ATTTGANCTT TATAAAGACT GAGGCACTAG  
 GTGTAAATA TTATCTCCAC TTTATATTG AAGGAAATGG GGGCCA

SEQ ID NO:1583: (Length of Sequence = 323 Nucleotides)

CTAATTTTIG TATTTTITAGT AGAGATGGGG TTTCACCATG TTGGCCAGAC TGGTCTCAAA CTCTGACCT CAGGTGATCC  
 GCCTGCCTTG GCCTCCCAA GTGCCAGGT TATAGGCATG AGCCACCAG CCTGGCCTTC CAGTTGTGAC CTTGTTAGGA  
 TACTGCTTTA ATTCATTTTC CCATTGAAAA TAAGCATGAA AATAACTGTG CAGTCATAAT TGTTGTATTT NCTGTNAAGG  
 AAAGTGGCAG GCCTCTGAGT GTTTATCGGG AGACCTAACC CAGTNTCAGA GGGGAAGTCA GAAGGCTTAC TNCCCAATGG  
 GGG

SEQ ID NO:1584: (Length of Sequence = 301 Nucleotides)

AAATACTTGT AAATCACTTT ATGTTTCTGA GTAAGGAAGT AATGAAACAT ACGTACAAGT AATCAGTAAG ACTTGTTAGA  
 CAGCTGTGTT TCAGGATGCC TTTAAAAGGG CTGGTAATGC AGTTACATTC TAACAGAGAA GTCCAAACTA CAGGTAAAAA  
 CTACGGCTTG TACTGTGAAA AATGTGCAGC TTTTCAGTTA TAAACTAGT TGAACACTGG TTTACAAGGT AATCCGTAGG  
 AACAGAGAGA CTGTAGGAAA ATATTCCAGC ACTTTGAGTT GTGTTTTGGC ASCAGCATTT G

SEQ ID NO:1585: (Length of Sequence = 328 Nucleotides)

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AAATACTGAT TTCAGACCTT CTGCTCTAG AAGTCAAAAT ACTTTCCCC TGACAAGAGG TAAGATAAGG TAGAAAATAG  
 AAACACTGGA AGAGAGATCT GGAATCCTAA AGCTGTGATG CCATAGTGTA GTGGGGGGGG GTGCGTGAGG AAGTCAGGAA  
 TGCCGCAATG TTAAAGGGAA AGGGAAGATG GAGCAAAGTG AGTCCAGGG CCAGCAGGGG GCCAGCCTTN TTTGACAGGG  
 GCAGGGGAGA AAAGGCCAGA CTTCCTATAC ACATGCTAGA GGGGAGGGCT AGTGTGAAG GGTAAATAGT TGAAGGAGTC  
 CACGGGCT

SEQ ID NO:1586: (Length of Sequence = 256 Nucleotides)

GGACTATCTG TATGGCAGAC TCATCAACTT TGAGAAGAGG AGGAAGGAGT TCGAGGTGAT CGCCAGATC AAGCTGCTGC  
 AGTCGGCCTG CAACAACCTAC AGCATTGCGC CAGATGAGCA ATTTGGGGCC TGGTTCCGGG CCGTGAGAGG CTCAGCGAGA  
 CTNAGAGCTA CAACCTGTGG TCGAGCTGG AGCCCCATC CGAGTCAGCC AGCAACACCC TCAGGACCAA GAAGAACACA  
 GCCATINTCA AGCGCT

SEQ ID NO:1587: (Length of Sequence = 371 Nucleotides)

GGATCTTACA GGCATAGACT TACACGAGTT TCTGATTAA ACATTAAAGA ATAATTCCAG GGACAGGATG ATACTTTTGA  
 AAATGGAGCA GGAAATTATT GATTTTATTG CTGACAACAA TAATCATTAT AAAAAGTTCC CTCAGATGTC ATCGTATCAG  
 AGGATGCTTG TCCATCGAGT GGCAGCTTAT TTGGAATGG TTCACAATGT GGATCAAACA GGNAAATCTG TTATCATCAA  
 CAAGNCCAGC AGCACCAGAA TTTTACCAGC CAGTCTTGTG TNGTCAACAG GGGNTTCCAA GGGCTAATAG GAGTNCAGCA  
 GCCACCTCA GAGTCAGAG TGGTTAAATN ACCCCCAAGG GACTCCGGTG C

SEQ ID NO:1588: (Length of Sequence = 314 Nucleotides)

CACACAGGAT TCCATAATAC TCCTGCTGTG TTCTGAATAT TTGTAATCA CATGGGATTA CTGAACACTA CTACGAGATT  
 CTGAATGTTT GINGCTCACA TAGGATTCOA AAATGCCCTT GCTGTGTTCT GTTGTGCCCT CACATAGGGT CACTGCTGCT  
 GGGTTCTCAG TGTTTCTCAC TCACATAGAA TTCCAGNACA CTGCGAAGAA TTTCTGAATG GTTTCTGTA ACATAGTATT  
 CCAGCACACT CTCGCTGTTG TTTGAATGTT TGTCCTTCAC ATAGGATTCC AGAACACTTC TGCTGATGTC TTGA

SEQ ID NO:1589: (Length of Sequence = 256 Nucleotides)

GACGAGGCAC CATCGGTGAN ATCGTGCACA TCCAGNGGG CCANINCGC AACCAGATCG GNGCCAAGTT TTGGGAGGTC  
 ATCAGTGATG AGCATGGGAT TGACCCCACT GGCAGTTACC ATGGAGACAG TGATTTGCAG CTNGAGAGAN TCAATGTTTA  
 CTACAATGAA GCCACTGGTA ACAAATATGT TCCTCGGGCC ATCTCGTGG ATCTGGAGCC AGGCAGATG GATTCTGTTA  
 GGTCTNGACC ATTGG

SEQ ID NO:1590: (Length of Sequence = 313 Nucleotides)

GGCAACAAGC CAAGTAGCAA AGATATAAGC AACAAATCAA TGGAGCCTGA AATATGATAA GAGCATACAT GCACTTTAAC  
 AATAATTTTG ATACTGGAAT GATTATTTCA GAAGCAATAT TTTTNCCTGAA AAGCATTGGT CTTCGTGACA GAAAAATAAA  
 AAAGTGAGCT GCCACTCATA GTGAATTAAG AGCTGTGGGC TGAAAGGGTC TCTTTTATAG CCAGTTTGAA ATTTTTCATA  
 TAATAAAAC AGTATGTAAA TATTATATAT ATATACACAC ATACATATAT ATGCATATAT GTACATATTT CTG

SEQ ID NO:1591: (Length of Sequence = 296 Nucleotides)

TTTNGTCTC CGGCTCACA ATTGAGCGAC TGCAGCTGG CCAAGGCCAG GGGAGACCTG GGTGCTTCA GCAAAGGTCA  
 GTTCAGAAAG CCAATTTGAG ACCCTGGTT TCGCGGGG ACAGGAGAA TACCGGGG ATCTTTACG GATTCUGGC  
 TCCAGTTCAT TGTCGCAAG GAGTAGGATT NGGGGCCAG GCCTGGCTC GGGGTTCCCC CGCTGCCTGC TGGCCAGTGG  
 CNGAACCCCC CANINCCTGC CACTINTCACA CAGTATTAT TGTACCAA ATGGCT

SEQ ID NO:1592: (Length of Sequence = 299 Nucleotides)

GGAAATCCCA AATTATGGGT AGTCCAAAAG CCAAAGGCAA TGTGAGGAAG GACACTCCCC AGATAAGAAC AAAACAGAA  
ATCTGTATGT NCTATGTGTT ACACACAGTT GCGAATAATC AGATGTACAC ACATGATGCA AAGGCACGCC GCTACACATT  
TATGTGATAT TCAGACATAT GTTCAAATAG AGGAGGTGAA TATCTTTTAA TAAATACAAT TTAGCAAGTA CAAGAATGCT  
GATCAGCTGC AGCTCAAGAG GAAAGGGGGG AAAAAATCTT ATGGGAAATT ATTAATACT

SEQ ID NO:1593: (Length of Sequence = 378 Nucleotides)

CCAGTTTGGT GATTCINTTC TGTGCTGCT GATCTATTGG CGTGAGAAGC TGAAAGTGAC CAGCCAACAG CCATAACTTT  
ATGTTTAGTG AGACTCATAA TGGGTCTCCT GCTGGAAGAT CTCCCCTCTA AGANTCAGTA ATTCTAGACC TGCAAAGTTT  
GAAGTTGTAA GCATGGGAAA CACAAATTCC CCAATAGGT CCAGATAGTG ATAGAGAATA AGACACTTAC TTGCCTACTT  
CCATTTCTCA GCCCAGATAT TCTACCTATA GTGGACATGC CCATGCAATG GGCTATTGGG TTTGAGGTAT ACAITGCACG  
GTGAAGGAC AGTGCTCAT CCTTGACGGG GTGCCCTTIN CCAATTGGCA CCACAGCT

SEQ ID NO:1594: (Length of Sequence = 353 Nucleotides)

ATTTTINCGG GGGAGGTGTA TGTAGATGAG AGTCTATGAT ATAAAGCAGT AAAAAAATG CTGTTGTATA GGGATGCAAT  
ATTTTCGGTG TAAGGAAGAG GTTTTAATTC ATAAATAGA AAACAGGTTG GAGAAGTCTT TAGGAAAGGG ATACCTTTTG  
GGTGGCTTT TGAAGGAGAA GTTTATACCC AGGTTCAAGC TGAAGGCTA AGTGAGTAAC TGAAAGGGCT GAGCTATTTG  
GATTACCATG AGGAATTTGT GATGGCTGGG AATGTAGGT GTGTGACCAG ATGTGGAATC ACAGAGGGAG CCCACAGAGG  
AGCTTCGGCA CATAANCTAA AGAGTTAAT TTT

SEQ ID NO:1595: (Length of Sequence = 343 Nucleotides)

CAATATATTA AATCTATTTT GTAGCTGGAC TTCACTTACA ATGTAACAGA ACATTGAATA TTAGATTCTG AGCATATTCA  
TGCAAACTTC CACTTTGGTG AAAGTGATGA CAGTGGAGTT CTGGAAGACA ATTTTCCTTG TAAACACCAA GTTTTGCACT  
TTGGACTATG CTCTCAAGAT AGAACTTAC GTGAGTGGAA AAAGAAAATG TATAAATGTG AACAAATATT CCTTACCACA  
CAGAATAACC CTGGCAACAA ACAATATCCC CAAGTCTGG GINATTCAAT CCTCACCGTG GGCAGGAAGG GTGAAGGAGG  
CTGCACCTGG GNCACAGCCT TTT

SEQ ID NO:1596: (Length of Sequence = 373 Nucleotides)

TAGTCAGTTA TTGCTGCACT AGAGCTAAAT AAAAGACATA AATATCTAAG GCACTTACTG GAATAAACAT CTTATTTCCG  
CTAAGAGGTT GGCTAGGGAA GCTCTGCTTC AGAGTATGGG TTGAGTATAA GCCTGTNCCA CATGCTTTT GCTCTGGGAC  
CAGGAGTTGT GCAGCCCATC CTTTCTCAA GACAAAAGCT GAGCCAAGCA AGGACATTTA AAGCTTCACT TCTGCTCACA  
TCATATCTAT TGGNCAAACA TTCCATTGGG CCAAAGCAA TCACATGGGC CAAGTCAAGC ATCAGTAGGT CTGGGGGAAT  
ATTCTTTCTT CTACTCTTGG ACACATGGGA AAGGGTTATG CATACTAATT CTT

SEQ ID NO:1597: (Length of Sequence = 276 Nucleotides)

GATTGTCCAT ACTTGATTAT TAGTTTCTAA AGAAAGTATT CTTAATCCA AGCCTAATAG CTCTTATGTC ATTAGTTTCT  
AGTGCAGAGA AATGTACTTG ATGAATTTT GTTGACTTTT TTTTGTGCTA GCCAATATGA AGGTTGCCAG TCCCTGCCAA  
AATAGCACT AAACTATTT TNCATGAGTA ATAACAATA TATTCTTTT TAAATAGCAC CTTTACCCA AAAATCTTAA  
GCCTATATAA ACATTCACCT AACANTACAC TCAAAA

SEQ ID NO:1598: (Length of Sequence = 355 Nucleotides)

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TGTATTGCTA ACTGTCCTTG TAACTAATTT ATGTATACNC TAAATGGTAT AGCATGTGAT TTTATTATAG TTGATTAACT  
 TTGTAATTNC TGTAAGTGCA TCGATATCCC AGTCTACCTG GAAAATTAAG TCTATTAACC ATAGTTGCTG TGGGAGACAG  
 TACTATTGCC AACTGAAGCC TGAATCCTTC ATTTATTTTG TCCCAGTTA CAGAGTGGAG GTTTAGAGGA GTGGGGTTAG  
 ATAATGCTCA GATTAGAAAT ACAAAGGCAG CTGTCAGATC CTCCCATTTT ATTTGTTTGA AGGAACTGAG GTTGGTAAAC  
 ATCACAAGNG CTAGTTAACT GGTGAGTAGC AGCCC

SEQ ID NO:1599: (Length of Sequence = 313 Nucleotides)

GGAGGTGAAG GACACAGTGG ATGGGCAGAG GNTCCTGGAG AAGAAGGGCA GTNCTGCNCT CAAGGACCTC AAGCGGCANT  
 GCATTTGGAG CGGAAACGGG CAGATAAGCT GCAGGAGCGA CTNCAGGACA TCCTCACTAA CAGCAAGAGC CGCTCAGGCC  
 TTNAGGAGCT GGTTCCTCTCA GAGATGAACT CACCAAGCCG GACCCAGACA GGGGACAGCA GTAGCATCTC CTCCTTCAGC  
 TACCGGGAGA TCTTCGGGA AAAGGAGGAG CTTGGGCTTG TTCCAGCCAG GTCCATTATCC AGCAGNCCIN AAG

SEQ ID NO:1600: (Length of Sequence = 277 Nucleotides)

AGTTCACAGA ACTCCAATTC TTTATTATC ACAGCTTGCT CACAATGACA TACAGGAAAA TAGCACTAAT GAAGAGTAAA  
 TATGCAGGCA GCAACCTTCA GGAGTTGGGA GTTGGGGAGA AACGACTTCA AAAGTGGAT AGGTAATTTAT GGTGGGTATC  
 TGGTGATTCT TAGTTGGCAC AAATGCCCTG CCTAGCCCC TTAAGTGGT CANTTTCACA GATGGAGTGT TTTGTTGTTG  
 GTGTTGTTAG TAGGCAGGAT TGCCTTACAC TGGGGGA

SEQ ID NO:1601: (Length of Sequence = 228 Nucleotides)

TTGAGACCAT CCAGGCTAAC ACGTGAAAC CCCGTCTCTA CTAAAAATCC AAAAAAAAAA AAAAAAATT AGCCGGGCGT  
 GGTGGCTTGC GCCTGAAGTC CCAGCCACTA AGGAGGCTGA GGCAGGAGAA TGGCATGAAC CTGGGAGGCG GAGTTGCAGT  
 GAGCCGAGAT CGCGCCACTG CACTCCAGCC TCGGCGACAA AGCAAGACTC TGTCTCAAAA AAAAAAA

SEQ ID NO:1602: (Length of Sequence = 299 Nucleotides)

GGAAGTCCCT TCTAATGAAG AGGGGAGATG TTATOGATTA TNCATCATCA GGGGTTTCCA CCAAGATGC TTCCCCCTG  
 GTTCTATCA CTGAAGAAGA TGAAAAATCA GATCAGTCAG GCAGTAAGCT TCTCCAGGC AAGAAATCTT CCGAAAGGTC  
 AAGCCTCTTC CAGACAGATT TGAAGCTTAA GGAAGTGGG CTGCGCTATC AAAAACTCCC AAGTGACGAG GATGAATCTG  
 GCACAGAAGA ATCAGATAAC ACTCCACTGC TCAAAGGATG ACAAAGACAG NAAAGCCGA

SEQ ID NO:1603: (Length of Sequence = 263 Nucleotides)

AAGGCAAGAA ATTAGCCTTG TTAAGAATTT TAAGTGTAAAT GGAAGCCAT TAGAGGGTTT TAAACAAGGA AAGATGTGAT  
 GTGACTTATA TTCTAATAGG ATTGCCTTGA TTCACCTATG GAGAATGGAT TNNIGGGATC TCAGTACTGG GATACTGAGA  
 TOCCAGGGGG AAAATATCAC TAAGGTGGA ATTGCTTTTC TGCACATTAA AAGCAATTCT CTTTTCTCTT GAAACCTCCA  
 TGTGATGTTA ATTAGGGTAA ATG

SEQ ID NO:1604: (Length of Sequence = 260 Nucleotides)

ATGAAGACGT ACGACTTATT TTTGTGTTCT GAACATAAGT NCTTTGTAC ATAAAATGTG CTATGAATGT TGAGTTTAA  
 ATACTCGAGC GGTGACTCAC GCCTGTAATC CCAGCACTTC GGGAGGCCAA GGCGGGCGGT TCACCTGAGG TCAGGAGTTC  
 GAAACCAGTC TGGCAAACAT GGTGAAAACC CCGTCTCTAC TAAATAACA AAGTAGCGG GGTGTCGTGG CGTATGCTGG  
 TAATCCTAGG GTTCTGTCA

SEQ ID NO:1605: (Length of Sequence = 290 Nucleotides)

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GACAGACATT CAAACCATGG CAGGTGGCAA GAAGTATCAA ACTACTAGAT CCTTGGGATT GINCTTTGTA CTGGGGTGTA  
TTTTTNCCAA CAATCCTAAA AATCATATGA ATAGAGATAG CAATATATAT CTNACCCATT TGGAAATGCA CAGAGATTCA  
GGAGTGTTC CATAGAAACA GAAGATCATT GGCTTTTGT CATTCCCAAC GCCAGNAATC TGTTTTCCTT GACTCTTTTT  
GATCTGTGTT TCTGAATGTT TTGATATACT GCGCCTACTG GGTGTGCAGG

SEQ ID NO:1606: (Length of Sequence = 290 Nucleotides)

CTCACTTGGG TACTACAGTG TGAAGCTGA GTGCATATGG TATATTTNAT TCATTTTTGT AAAGCGTTCT GTTTTGTGTT  
TACTAATTGG GATGTCATAG TACTTGGCTG CCGGGTTTGT TTGTTTTTGG GGAAATTTTG AAAAGTGGAG TTGATATTAA  
AAATAAATGT GTATGTGTGT ACATATATAT ACACACACAT ACACATATAT TATGCATGTG GTGAAAAGAA TTGGCTAGAT  
AGGGGATTTT CCTGAACACT GCAAAAATAG AACGTAGCAA AATGGCTTCA

SEQ ID NO:1607: (Length of Sequence = 365 Nucleotides)

GCTCCACTGA CCAGCTGTTT CCTGTCTCTC CTCTCTCTTG AGCCTCCCTC TTCCCTGAGA CACAATAATA TTAAATTTTG  
GCCAATCAAT AACTCAACAA TGGTGTCTAA TAATTGTTCA GGTGCGAGGA AGAGGCATAC ATCTCTCACT TTAAATCAAA  
AGCTAGAAAT GATTAAGCTT AGTGAGGAAG GCATGTCAAA AGCCGAGACA GACCAAAAGC TAGGCCTTTT GTGCCAGTTA  
GCTAAGATGT GACTATAAAG AAAAGCTGTC GAGGGAAATT TAGAATGGTA CTCCAGGGGA ACACACAATG ATAAGGAAGC  
AAACAGCCTT ACTACTNGGA TATGGGGAAA AGTTTTTCAGC TTTCG

SEQ ID NO:1608: (Length of Sequence = 294 Nucleotides)

CTCAGGAAGC CTCTCTTTCT TCACITACCA TTACTAATCT TCCAAGCATA GAAATCCCTG GGAATTGCGA GAATAACTCC  
CACTATTTTA AAATTTATAT TCAGATTTGT TTGTTTCAT AAGACACATC AAACAGGCCT ATACAAAAGG TTTAGGAAAA  
GAAACAATG GTGAGTCCCG GCCCTCTTCG AATTCAGTGG CACCTCATGC AAGTNTAGGA AGGCACGCTG GATCGTCTAT  
CTGATTCCAA AGCTGTCTTT TGCCATCTCA TCCCTTGNC TGCCCCCAA CCT

SEQ ID NO:1609: (Length of Sequence = 393 Nucleotides)

CAAAAGCTAA CTCTTAATAA GAAGATGAGG AAATAAAATC AGTTCAAAAG GGAGGAATAT GCATTCCCAG AATTAAAGGA  
CCCCGGGTCC AGTTTGAGGA GGAATCTTGG CCAGATACAA GCCCCTTGTA TAATNCTCAA GAGGGAGGAG ACCTTATTIN  
CTCCTTNGAG GTGTCTAGTA TGAAANCTGC TTATTTTGAA ATGTGATTCT AGCCATTATC AGGNGCAACT GCAGATAATT  
CCCATTTTACA GAGGAATGCT GCTAACAGGT GTGGGNGGGA GCAGCGACAN CGNAAAATTC TGCTGTGATA GGTACGTTTT  
ATGTTGGTTT TCTTTGAAAA TCAAGGGGTA GAAAATTTC TGCCTCTAGA GGAGAGAGAG GAAACACATG AGG

SEQ ID NO:1610: (Length of Sequence = 464 Nucleotides)

TGCTGTGATT TATTAAATTG CCTTTACTAC TTTTAGATGG CCATACGTTT TCAAAAGCAA AGACCTAGTA AGCCATTGT  
GTTCAATTGC TAAGCTATCT TAGGTACAGG TCCAGATTAT AAATGTTACC TGCTAATCAG AGAGCAAATT TTTAAATTAA  
TCACTGTGTA ATCCACATTA AAAGAAAAAG AAAGTTAGAA AAACACATAA ATTTCTTTTG TGATCCCACT ATTCAGGAAA  
ATCCATTGAA AAAGCAGATG ACTTATCCGT GTTAAATTTT TAAAGNCCCT ATTTAAACTG TCATGTAAAT TCINATTTAT  
CTAATTTTTT AAAACACATA TAGNNTTTTA CTCTCCAGTT CCATAANTGN CTCANITCTG GTGANGGTCA TTACAACAGN  
CATTACGNGG GCATATCGGN NTAAAANGGC CNTGCGGTCC TGNATNGAG GNGGGGTAA GGTC

SEQ ID NO:1611: (Length of Sequence = 465 Nucleotides)

ATAATTTAAA GAAAAGAGAA TTCTACAATG TAAACCCTT TAATATAAGC TGTTTTAATA ATTGGAAAAC AGAATGANTA  
NTGTTTTINT TTGTCATGCC CAATTATTTT ANCAAGTTTT TATTAATAAC TTGCTACATG GTAGGCACAG CTGTAGGTGT

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TGGAGATATA GAGGTAAACA AGTCTGACAT GATCTATGCT ACCAOGGAGT TCTTATTTTC AAAGTGAAG GTAGAAAATA  
 AATAAAATG ANCTAGAAGA GCAAAGTGCC TCTGAATGAG CATGCAGANG CATGTTTTCA AAATGTCTGT GNGTGGGATA  
 AATAGATCAG CAACACACCA GGCCATGCAA TTINGCAGCA AATCACTTCT GCAGTCTAGC TGCTGTTTTT CCTACTCTGG  
 AATCATACTC CCCCCTTCGG TCATCINTGC CAGTTTCNCT GNGCTTCACC CTACCCCTCN TTTTN

SEQ ID NO:1612: (Length of Sequence = 458 Nucleotides)

ATGAAATTGA ACAAACCTAA AGAGAAATGT TCTTACCGTT CCACAGGAAC CAGCTTCTTC CACTGGGCCA CTAGGTCCCT  
 GGCAAAGCTT CCAACATGCT CGTGTTTTCG CAAGCTATTT ACTGTTTTCC CAACCCAGT CTCTAAAAT TTGACAAAGT  
 AATTGTTAGA GGGGTCTGGA ACTAGGCTAA CGTTTTTCTA AAGAAATAAG GCCTTCTACT TTGAGAACT CAACAAGCAA  
 TACTTCCTTC CTACAACATA CCGTGCAAAT CTTAACACTA AATTACTTTG TGTCTATGNC CCAAATCTCT AATGACACAC  
 AGTAGCAAAG NGTACCAAGT TCAGAACTTT AATAACAGNG GTNATTAGGG CAGGTGTTAG GGCCTAGNT AAGNGCTTTG  
 CATCAGTTCT GGATCAGNCT TTTAAATAAC CCGTTAAGNG GGGNTNAGNC CCITTTTTT

SEQ ID NO:1613: (Length of Sequence = 322 Nucleotides)

ATGTGGAGAT TTGTGTGGG CTAGGGCAGT CCAGAGGAGA GATAATGTC AGGACAAGTC TCTACCCAT ACAAGTNCCT  
 CCGGCAAGCC CTCAGCAT GACATAGGCC CAGAGAAGGA TGCAAAGAAT TCTGGTCATA AATTGTTTTT AAATATCAAA  
 TAAATCATAT GTGCACATGC ACAAACATGC CTTCACAACT GAGTAAACC AGACTCACCT TCAAATATAT CAACAGTTTT  
 NTCAGCGCC GTTAAAAATC AGGCATCGGA CCTCTGNTN CGAGAGCTGG TTINATGGGG AAGTTAGATC AACCCGTCAT  
 CT

SEQ ID NO:1614: (Length of Sequence = 280 Nucleotides)

AGTATCAAGG GATAAAATAT ATTTTAAAT TTGTATTTCA CTTGAAAATT GTAAGGNCCA TTTTATAATG TATGCTTGC  
 AAAATAAGTC ATGGAAGCCC TGAAAAATTA GTCAATTCAC TAATCAAAGA AACATATATT AAAGACCTAC TATGCATGAG  
 GCACCATGCT AATTGCTTTG AAGAAGACAA AGTTGAATTA GACAGGNTC CCGTTTACAA GNTATTTACA ATGCAAAGGG  
 GGATACAAGA CATATAAAG GCTATGGAAC TGCCCTTCOG

SEQ ID NO:1615: (Length of Sequence = 393 Nucleotides)

GCGTGGTGGT GCGTGCCGT AAATCCCAGC TACTACGGAG TCTGAGGCAG GAAAATCCCT TGAACCAGGG AGTCGGAGGT  
 TGCACTGAGC CGAGAGCAG CCACTNCACT CCGGCTAGC GACAGANTGA GACTCCGTCT CAAAACAAA CAAAACAAA  
 CAAAAACCA AAAACACTGG GAGTCCCAGT TTGTAGGAAA TCATTAAGAT TTTATTTATTT GAGCTCCAGA ACGAGTGAGG  
 ATGACCTGAT AATTTTGGTT TGGCTCAGGT TGTAATGTTT TTCTGTTTTG CTCGATGACT ACTAGAACAG TTCTCAAAC  
 GTGTGGTGGG TAAGAATCAC CTGGGGACTT TGACCAAGTN ACATGTCTAC AACACCCGGC CCTACAGGC TCT

SEQ ID NO:1616: (Length of Sequence = 353 Nucleotides)

CCACCCAGC CTCTTGGAG CTATCCCTTT CTATCCCTT CCATCCAGC CCTGGCCACC ACCATTATAT CTATTCTGGA  
 ATTCCACAG GAAAAGCAGG CACTTTATA ATCAGCGAGG GATTACGGC GAAATGAGAC TGTTGTTGAG TNATGGCGTN  
 CCGGGTGGT TCGCGTGGT GGCCGCGNC GGGAGAGCC GGGGAGAGC AGAGGTGCTC ATCAGCACTG TAGGCCCGGA  
 AGATTGINTG GTNCCGTTC TGACCCGNC TAAGGTCCCT GTCTTGACG TGGATAGCG CANCTANTCN TTCTCCACTA  
 GTGCAATCTG CGGATAATTT TTTTGTGTTA TCT

SEQ ID NO:1617: (Length of Sequence = 227 Nucleotides)

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TTTCTTCCAT GCAACANICT GNAGACTTAA GTGGCTTTCT NCTGTACTNC CATAGAACCC ACCCAGTACA TACCTCCAGT  
 GNGGCACTGA TTTTATGCTA TACATATGAC TGIGTGTTCA TCTCCTCCAC CAGACTGTGA GTCCCATTTG AGTAGGAAGT  
 AAATTTTINTT CAACACTCTG TCTTCATCAC CTCGTGTAGT ATCTTGTACA GAGTAGATAA TGATTAA

SEQ ID NO:1618: (Length of Sequence = 362 Nucleotides)

GGAAGGTTTT TAATGCATGA NGIATACTTG TNATCCTGGA GGTGGGAAA GATTGAGTAA AGATAAAGTT TGGCAAAAAT  
 GATTCTCTCC CTAGGATTTG GGGATATGTA AATCAAACCA AAGGCACATT CTGCAGCTCA CAGCAACCTT CATTTTTTGT  
 CCTAGATTGA GTTATCTATC AAGAATCATT CATTCCCTCT CAGCCCTTGC AACTGTTTCC TATGACTTTG GACTTGGCCA  
 TGCAACTTGC TTTGGCCAAT ACAATGTGAG TTAATGTGCT TTAAGTGCAT GTAATTAGGT CAGTCCCTCC CTCCTTGAGC  
 TTCAACTCTC CACCATGAGG ACAACATTGC CTCCTTCTCT GG

SEQ ID NO:1619: (Length of Sequence = 344 Nucleotides)

GCAACCTCAT CCCAGGTTCA AGTNATTCTC CTGCCTCANC CTCCTGAGTA GCTGGGATTA CTGGCGCACC ACCACACCCG  
 GCTAATTTTG TATTTTTAGT AGAGACAGGG TTTCGCCATG TTGGCCAGGC TGGTCTTGAA CTCCTGACCT CAGGTGATCC  
 ACCCACCTCA GCCTTCCAAA GTGCTGGGAT TCCAGGCATG AGCTACTGIN TCGGCCCAA TCTTTCTTAA GTTGTGTCTG  
 GCCTTTGGCA GAAATAGCCA CAAAGNCAGG GTAGGAACGT TTTACTCTTC AAGTGATGAT GGCATCCGAT AANCITTTAG  
 AGGGAGGTTT TTAAAATGCA ACGT

SEQ ID NO:1620: (Length of Sequence = 379 Nucleotides)

GCCAGCGAA GCTCCTCAGG CTCCACCT CTACAAGCTC CTTCGTCTCC AGCCACACTC ACCAGGCCCG AGTTCCCACC  
 TAGCACCTTC CCTGGGAATN ATCTCCCCCT GGTGGCTCT TTCTACTTAT TCAGCCTCAA ATGINATCTC CACTGANAGG  
 CCTTCCTGA CCTGCTGAGC TTGATTCCCT CCCCCTCCCA GTNACATTAC TCCGTGTAT GGTACCCATC CCTGTCTCCT  
 TAGCTGTITT TTGTCTGTAT TGGCTCTTCC ACTAGACTGT AAGCTGCATG AGGGCAGGGG ATGTCTGTTT AATNCCAGTT  
 GCTCAGGATA GTGTATGGCT CGTGATAGAT GCCTAGNACA TTTTAAAATG GGGACGGAT

SEQ ID NO:1621: (Length of Sequence = 283 Nucleotides)

GATTTGGGGG CTCGGGGAGG CAGAGAATCT CTGGGAGTC TTGGGTGGCG CTGGTGCATT CTGTTTCTCTC TTGATCTCAA  
 AGGACAATGT GGATTINGGG ACCAAAGTTC AGGGACACAT CCCCTTAGAG GACCTGAGTT TNGGAGAGTG GTGAGTGGAA  
 GGGAGGAGCA GCAAGAAGCA GCCTGTTTTC ACTCAGCTTA ATTCTCCTTC CCAGATAAGG CAAGCCAGTC ATGGAATCTT  
 GCTGCAGGAC CTCCCTCTAC TACTTCTCTG CTAAAAATA GGG

SEQ ID NO:1622: (Length of Sequence = 356 Nucleotides)

TTAATTTTAA AGCAGATAAT ATTCAAATA TTTTCTTTGA AATAGACCAT TTGTCTGCC TTGAAGTATG TTAGTACATT  
 TTAAGAAAGT CAGTGGGTTA AGGAGTCAGT GCTGTTAGTA TTCATGCTTA AAACACTTCC CTCTACCTA CCTAATAAA  
 TGAGGGGCTC AAGAGAAATA TTTCTAATTC TCTAGCGACA TGGCTAATTT TTTTPTTAA TGTATTTTGT TATTTTTAGT  
 ACAGATGGAG TTTACCATG TTGGTCAGGC TGGTCTCAA CTCCTGAGCT CAAGTGATCT GCCTACCTCA GGCTCCTGAG  
 TCACTGAGAC TGTAGTTGTG TGCCACCATG CCAGGT

SEQ ID NO:1623: (Length of Sequence = 361 Nucleotides)

TTTGAACAG AGTCTCGCTC TTTCGCCAG GCTGGACTGC AGTGCCACTA TCTCAGCTCA CTGCAAGCTC CACCTCCCGG  
 GTTCACGCCA TTCTCCTGCC TCAGCCTCC GAGTAGCTGG GACTACAGGC GCCCGCCACC ACGCCTGGNT AATTTTTTGT  
 ATTTTTAGTA GAGACGGGGT TTNACCATGT TAGCCAGGAT GGTCTCGATC TCCTGACCTC GTTGATCCGC CTGCCTCGGN

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CTCCCAAAGN GTTGGGATTA CAGNGTGAG CANCCGTGCC CAGCCGINAA GTTAAGATAT TTAAAAANA TCTCTGCAAG  
TTGAGGAAGT NMTTCAGGAC TCTTCTCTGC TTAGTCTCAC T

SEQ ID NO:1624: (Length of Sequence = 350 Nucleotides)

CTTTGTGAGC TTTTGTACCT GCGGGATCCG AGCCAGATTG ACAACAATGA GCCCTACATG AAGATCCCTT GCAATGACTC  
TAAAATCACC AGTGCTGTIT GGGGACCCCT GGGGGAGTGC ATCATGCTG GCCATGAGAG TGGAGAGCTC AACCAGTATA  
GTGCCAAGTC TGGAGAGGTG TTGGTGAATG TTAAGGAGCA CTCCCGGCAG ATCAACGACA TCCAGTTATC CAGGGACATG  
ACCATGTTIN TGACCGGTC CAAGGACAAC ACAGCCAAGC TTTTGTACTC CACAACCTCT GAACATCAGA AGACTTTCCG  
GACAGAACGT CCTGTCAACT CAGCTGCCCT

SEQ ID NO:1625: (Length of Sequence = 333 Nucleotides)

GTCTCTGTG AGACAAAGAA ATTATAAGA TGGCAGAAAT TATTAGCGAC GTTCTACCTC TATAATTAC GTTCCATGAA  
TCAGTACTTC ATTTCTTTTT TATGGATGAA TTAATATTCC ACTGTACAAA TATACCACAT CTGTGTTTTT CATTCGTCTA  
GGTAAAAAA TTTTTATTTT TATTTTATTT TTTTGTGAGA GACGGGATCT CACTGTGTG CCCAGGCTGG TCTTGACCTC  
CTGGGCTCAA GTGATCTCC CACCGTGGCA GTCCAAAGTG GGTAAACTGT ACGCTGGTCT GAAAGACCTT GCTGAAGAGA  
GAAGAGGCAA GCT

SEQ ID NO:1626: (Length of Sequence = 314 Nucleotides)

GACTGTCCGT GGACACTGGT TTTTAAGCCC AAGAACTGAA TATACAGTAG CAGTGCAGAC TGCCCTAAAA CAAGTTGATG  
GTGATTATGT TGTGTCTGAA TGGAGTGAAA TTATAGAAAT CTGCACCGCA GACTATTCAA AAGTTCATCT AACACAATTG  
TTGGAGAAGG CTGAAGTGAT TNCAGGACGC ATGCTTAACT TTTCTGTTTT TTATGTAAAT CAGCACAAAG NATATTTTGA  
CTATGTTCCG TAAGNTTCAA AAATATATAG TGATTGTITT TACTAAATAT AGTTTCAAAT TCTAGGCTCA GGGT

SEQ ID NO:1627: (Length of Sequence = 375 Nucleotides)

CCCTGGGCAC CTGGTACCTG GGGACCTACA AGGTGGTGAG GGAAGGGTAC GAGTACATTC CTINTCCCTC TGACCTGGGC  
GCTAGAAGGG CAAAGAACCC GAGCCTGCCA GCTTGGCTTC CTCCACAGC CTCCCTGGGA GGCATGCCAT GCCAAGCACT  
CTTCTGTCT CTGTTCATGA ATAAAGAGA TGGATGGGCT TATCTTTATA GAGAAGTGAA TTTCACTTAC TCCCCTGGCC  
CGAAAACCTAG ACCAAATGAG GAACTGTTTT AGCTCATCAA ACTGTTATAT TTATTTTCAA CAATGAAAAC AACACAACAA  
AGTGGAGTCA ATCCACTAAT TTTTATAAAT CTAACACAAT TGTTGCACA ACAAT

SEQ ID NO:1628: (Length of Sequence = 434 Nucleotides)

TGCACAGGCA CACCTCCACT CTTTATATCA TTTCTCCAT CTTCATTTC CCATCTGTAC CTCCAAAATT TTGCTATGAA  
TCTAATTCAT CTTGCTCTC TCTCTCAT GGGTGCCMTT GCTTCTGCCA GTCTTCTTC TCTGCCCCA CCCAACTTC  
ATGAATTAGT CTTTCTCCC AGGAGCTCTG ATTTCTAGAC TGCTTTGAAA ATGCTGTATT CATTTTGCTA ACTTAGTATT  
TGGGTACCC GCTCTTTGGC TGTTCTTTTT CTGGAGCCCT TCTCAGTCAA GTCTGCGGA TGTCTTCTT TACCTACCC  
TCAGTTTTCC TTAACAGNG NACACAACCTC TGGAGAGTGT TAAGNATAAT GTTACTTGGT AATGTGTATT TATTGAGGAT  
TGTTGTGCTA AGAATGNGTA GGTAAATA GGGG

SEQ ID NO:1629: (Length of Sequence = 341 Nucleotides)

CTTCAAAGCT GCAGGGAGGT GGGGGTGGCC GGCAGACAGG GTGGGGTCCG CATCCGGTAC CAGTACAGT AGCCTCTCT  
CTCCACGGT GGTCCTTGTG TGGGGCTGTG GCCAAAGTGT TTGCCCGGCC CCGTACTGTA TCCCTCCGGA GCTGCCGAGG  
ACTGCAGAGA GGGCCTGGCT TGTCCCTCT AGGAGCAGCT GGGNNGGTGT CTTGCTGCA TCCCCTTCA ATGGTTGAAA



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ATAATGATTG CACTTGTCAT GAACACCATG AAGGTATCTT GGCAGCCAGA GTCACCTCTG TTCCCGAAGT GGGAAACCTN  
GGGAGGGTCC TCAAAACCCC T

SEQ ID NO:1630: (Length of Sequence = 380 Nucleotides)

CATAAAACCA TCCTACGATG TGCTGCTGCT GCTGCTGCTG CTAGTGCTCC TGCTGCAGGC CGGCCTCAAC ACGGGCACCG  
CCATCCAGTG CGTGGCGCTC AAGGTACAGT CAAGGCTGCA GGGTGCATCC TGGGACACCC AGAACGGCCC GCAGGAGCGC  
CTGGCTGGGG AGGTGGCCAG GAGCCCCCTG AAGGAGTTTG ACAAGGAGAA AGCCTGGAGA GCCGTGCTGG TGCAAATGGC  
CCAGTGACCC CCAGACGGG AAACCGGGTG GCAGCGCCAG CCTGGGCCCCA GGCATGGAAA CGGACAACCC CTAATCGCCT  
TAGCTACTGC TTCTAACAAAC TCTTTTCCCT TGTGTTAAGG GAAACCAGGT TCAAGGGGGG

SEQ ID NO:1631: (Length of Sequence = 383 Nucleotides)

AGAGGATTTA TTGGACAGG GCTGTGCTGA GAGTCCCACC CTCACCCAC AATGGGGGGG GGCCTGGCA TCGAACACCA  
AGCTGAGTGA GAAGGGCTCC TCCAGGCCTC GCAGGGAGCT TGCTGGCTTC TCCTGGCTCA CAGCAGACTG GGCCCGACTC  
CCATCGGAGG AAGGCCAGCA TCCTAGGGCA GCCAGTGGAG GGCTGGCAGA GGGCTGTGCC TNGAAGGTCA CTGTGCTATC  
TTCCAACCAC ACTGTGTGAG TCTCAGATAC CATATGTGGA ATCTGCATCA GGAAGGTCAA CTTGAGGTCA TTTTAAAGG  
GATTCTTCCG GNAAGAGGAG CNCCGCATCG GCGCNCCTTA NCCGGCGTTT CGGTTCATCC CGA

SEQ ID NO:1632: (Length of Sequence = 424 Nucleotides)

GGGAAGTGAG CTCTGAACC AACTCTGAAG GAGACACCCA CTGTCTAAGC CAGTCTCACT CTAGGACACC TGCTAGCGA  
CCAGCAAACC TGAATGAAA GGSAAAGTTC CTCAGTCCCC CCTCTGCATC AAAGGGAGTG GCTCTGCCCT CTCTAGTCTC  
TGACTACCTG CTTAGTGATT TTTGCTTCTG TGCTCCAGA CCCAAGAAAA CCACGTCTCT TTTCTTCTT CATCGACTCA  
TCCCCTTCTT ACCCTATATT GTCTCCTCCA CTCTCTGCT CTGTGGCCA GGCTTAAATC TGGGCCACCA GCTTCTCTGG  
GACATACCTA TTTCGCAAC TGAACCTTCC CAACCCCTAG GAAACAAAG GTATTTTACA AGGCCTCTGG ACCTTGACCC  
AAAGAGGCAT GNAACATAAT TACT

SEQ ID NO:1633: (Length of Sequence = 417 Nucleotides)

TTTTTCTAC AGCATCTTTT TATGTCTTT ACCATTACTT TAATGCATTT TAAAATTTAT CTACATTAAT TGGGAACATAT  
TTGCATTTTT TTCATCTCT CTCTTTTTN CTTTNCCTT TTTTGGATTT GTCTTGGCCA GAGAGGTCT CCAACACCCG  
GGTGGACTTG GAATTTTTTA TCAGCTGCAA TCTGAAGACT TGTCTTACT GTGGAATAGG TGACATTCCT TTAGGACCTC  
AGAAGCTCAA GTAGTTTAAT GCCAAGTCTT TCCAGAGCCT CACTCTCTT TATTTTTTAA ATTAGAATTG TGATTTATTG  
AAGNCTTACC ATGGGGTTCA TATAATTINT NAATNGANCA GCTTTATTGA GGTATAATTC AATACCCCTT TAAAGNATGT  
AACCGTGGG TTTAGAC

SEQ ID NO:1634: (Length of Sequence = 423 Nucleotides)

AATATCCAA ATGTGCAATG CATCACCTGA GACAGAAGGC AGAAAGCATC AAGCTCTCTG TTTATCCAA TTCAATGACA  
ACCAGAACTT ATTTTTTTTG AGATGGGGTC TCGTCTGTC GCCAGGCTG GAGTGCACTG GGCATTCAT GGCTCATCGC  
AGCCTCAAC TCTCAGTCTC AAGCAACCTT CCTACGTCAG TGTCTGAGT AGCTGGAATC ACAGGCATGC ACCACCACAC  
TTGGCTCATT TTTAAAAAAT TTCTGTAGA GACAGGATCT TGCTACATTG CCCAGGCTTG AGGTGCCGTG GTGCATTAC  
AGCTCACCGC AGCTCAAACCT CTTTGGTCTC AAGCGATCCT CCGTCTCAG CTTCTGGGT GGTGGGCT CAGGCATACA  
CCACCATGTC TTGGTCAATT TCT

SEQ ID NO:1635: (Length of Sequence = 384 Nucleotides)

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CAAACTCAC TTTGACCCCA TTAAGAGGCA AGCCTGGCAC ATCTATCCCT GGGCCTTTAG AAAGCCATTT GCTCAAATG  
 GCTATAGGTT TGTGGGGTGG AGGGAGGAAG GGCTGGGAGG GAGTNGGGAG GAATTGCTAG CTGTAGTGTG ACACATTGTA  
 GTGTTTGCCA GGAAATGAGC CAGACATGGT GGTGTATGCC TGTAGTCCCA GCCACCCAGA AGGCTGAGGC AGGAGGATCG  
 CTGAGACCA AGAGTTTGAG CCGCGGTA GCTGTTAATG ACCACGGCAC TCAAGCCTGG GCAATGTAGC AAGATCCTGT  
 TTTCTACAAG AAATTTTTTA AAAATTGAGC CAAGTTTGGG TGGTGCATGC CTGTAGTTCC ACTA

SEQ ID NO:1636: (Length of Sequence = 362 Nucleotides)

CRAAATGACT GACTACAGCA ATGCCTTCGG TGTGCCCCAC ACATCATGAG CACGCAAGA GACAAAAGAT TAACTATGAA  
 ATATAGTAAT CTAAGCAAGC CCACACATAC ATATTTTGGG GGATTTCCCA CCATCCTGAA TAGTATCACT GCAGTTGACA  
 CACTTCCAG GGAAGTGCAG AGTAAGTGCT TAATATTATC CACGAGAAAG CAAAATAAA TATTAGTGTG CACATTTCIG  
 AATGAGAAAC TAATGCTTC ATTGATTICA ACAATGTAGT GGNAGNAAAC TATTTCAGAT CTCTACAATG CCTAAATGCA  
 TTCTATTAA ACTCAAGGTA CTATTTTCAT TTTTACCATA CT

SEQ ID NO:1637: (Length of Sequence = 205 Nucleotides)

GGGCCCCGAC GAGGCTCAGA CCTCTTNTAC GNGACTACT ACGAGGACGG CGAGGTGGAG GAGGAGGCCG ACAGCTGCTT  
 CGGGACGAT GAGGATNACT CTGGCAGGA GGAGTCTNA CACCACCAGA ATAACTTGC CGAGTTTANC TCACTAGGGC  
 CGGACCCGTG GCTCCTTAGA CGACAGACTA CCTCACGGAG GTTTT

SEQ ID NO:1638: (Length of Sequence = 253 Nucleotides)

CACTCAGGCT CACGCTCTG CTCTCTGCAC CAGCCTTCC AGAGCATNCC AGTNCCTATG GCTTCATCTG TTAAGTGTG  
 ATCACTTCAG TCTGTATTT TAGACCTAAA TGGTTTCTT AACGCCATTC TAACTGCTG TGACTCATTT TCACTTACAG  
 TGTATTATGT AACGCCAAAC CAACAAATCA CAGGTGCTTG CTCTGTCCA TAAATCTCCC CAGTCTAAT TTTTGTCTT  
 CAACATGCT CGT

SEQ ID NO:1639: (Length of Sequence = 360 Nucleotides)

TGTGGCCAAG GACCTATCG TCAATGTATG GTACTCTGTG AATGGTGAGA GGCTGGGCAC CTACATGGGC CATACCGGAG  
 CTGTGTGGTG TGTGGAGCT GACTGGGACA CCAAGCATGT CCTCACTGGC TCAGCTGACA ACAGCTGTG TCTCTGGGAC  
 TGTGAACAG GAAGCAGCT GGCCCTTCTC AAGACCAATT CGCTGTCCG GACCTGGGT TTTNACTTTG GGGGCAACAT  
 CATCATGTTT TCCACGGACA AGCAGATGGG CTACCAGTGC TTTTGTGAGC TTTTMTTGAC CTGCGGGATC CGAGCCAGAT  
 TGACAACAAA TGAGCCCCTA CATGAAGATC CCTTGCAATG

SEQ ID NO:1640: (Length of Sequence = 321 Nucleotides)

GTGGGACGCC CTCTGCCTTG TCCTGAGAGC AATGTCTTCT CCATGGGGCA GCATNGGCC TGGATGGGCC TGAGCATAGC  
 AGACCACTG GTCAATGTG CATGTGTGGA CATGTGTGCA TGTGTGGATA TGTATGCTCC TGAGTGTATC TGCATGTCTT  
 NCTGCACAC ACAGTGTCTC CCTCCGATGC TGCCAGCTG TGGTGGACTT CCTCTTCTGA CCCCCTTCTT GCNCCGGNC  
 TGTTTTATCA GTGAAGGAC TTAACATAAGC AGATCTCCAG GTTCACCTEN TGGAACTCAG CTCAAGGTNA GCACAGCAGG  
 T

SEQ ID NO:1641: (Length of Sequence = 266 Nucleotides)

GGTGGTGCCA CTGTCTGAT AGTTTTCCTC ATCTTAGTAG CGNACCCAT AATTAATGCC TACTCACATC AAGTTAGCAC  
 CACTCAAATG TGGGCCATTC ACAGGCAGCC AGGGATCTC TTGNNCCGTG AGGTGGGGG CTTCATCAG AATGCAATC

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TRCCGAGGCG TGAAGCACAA TTTAKTTCAA CTGCCATKTK TTCCTTCACA GTAAGRCCTT CTGGRGGAAG GAAGCAGTGT  
GTTTGAGTTA TACCTTAGGC CAAGCT

SEQ ID NO:1642: (Length of Sequence = 295 Nucleotides)

AAAAGCCCCA GCCTCAGGAC CCCGGTCACA GGCACCCGGG GGTGGGGGTG ACCAGCAGCA GTTCAGAGGC AGGTGTGGGC  
AATGTGGGCC TGAGTCTCCT NOCCACTCAC GTCACTNCCC GCGGGGACAC AGCGGCATTT NTGGGGCACT NGGCATGCCG  
GGTTCCTAAC CTCAATTATT CATTCGCTC TCAGGCACCT CCTGACGAGA CCCTGGCCCA GGAGAGCTCG GCTCGGGGAC  
AGAGGAATGA GACTCAGTGG GACGCAGAGN CCAACCCCAT CCCCACCCCT GGGCT

SEQ ID NO:1643: (Length of Sequence = 359 Nucleotides)

ATCATGGTGA GTTTAACTT TTCATCTAAT ATTAGATTGC ATGCAGGATT TTATATCTAA TTAATCTGGC AGATGGCCTT  
TAGAAAGTTC AAAAATAAAA TGCAGCAATT CATATTGGCA GATTTACTAT TGAGACCAAT GCTTTCTTAA CTAAAAGGTT  
TTGTTTAAAA TCGTTAGTTT AGGAAATCTG ATAAAGATT TTGAATATCA GAGCGTTTAA AAGAGATTCT TACTTTACAT  
CTGGCATATT TCTTGIGTTA CATATTATAA TTCCATTGGA ACATGGCTGT CTGTAAACT ATGTATATGA TCCGGAAGAG  
ACTCAAATTA AATTAAGGTT TAACAGCCAT CAAGTTCAT

SEQ ID NO:1644: (Length of Sequence = 293 Nucleotides)

TGAACCCGGG NGCGGGASTT GCAGTCAGCC GAGATGGCAC CACTGCACTC CAGCCTGGGT GACAGAGCCA GACTCTGTCT  
CAAGAAAAAA AAAAGAATTA AAAGATGTGA ACAAAGCAA GAAAGTGCTG TATGAACGAA ACGGAAATAT CAATGAAGAG  
AAATAAAAT TATAAATTC AGGAAATGAG ANGTACANTA NCAGNAAATT CACTGGAGAG ATTCAAAGC ATATCTGACC  
AGGTAAAAAA AGTAGTGAAC ATGAGATAGG TCAAGGGAAA AGTACTGAGT CTG

SEQ ID NO:1645: (Length of Sequence = 332 Nucleotides)

AAAAGCTGGA TATTAGGAAA TGGAATATT AATCTGAAT TTGTTACTGA CTCAGGATGA CCTTGCATGA TGCATCCAAC  
CTTCTTTTCT CTATATCAGA AACTAAAGA ATAAATGTAA CATCACATTC TTTTCTCCTT TGGGACAAAC AACTATGTAC  
AATTGAATAA AAATGAAATT GCATAAGTNG TGGATAGAAT ATGTTTGGGT TGGTTGAAC TTAGCACACT GTTTAATAAT  
TCAACATTTT TTATACCTGT GCAATAAATT TTTAAATGAT GTCTGAAATG CTTTGAAATC TTCAGAAACA GGTTTATAAA  
TGGCATAAAA AA

SEQ ID NO:1646: (Length of Sequence = 210 Nucleotides)

GAAAGTNCCT CCAATCACTC TCTGCACAAT GAAGTGGCGG ATGACTCCCA GCTTGAAAAG GCAAATCTCA TAGAGCTGGA  
AGATGACAGT CACAGCGGAA AGCGGTGGAA TCCACATAG CCTGAGTGGC CTGCAAGATC CAATTATAGC TCGGATGTCC  
ATTTGTTTCT AAGACAAGAA AAGCCCTTCC GAATGCAGCT TTGTTAGCCA

SEQ ID NO:1647: (Length of Sequence = 246 Nucleotides)

TCCACTCCAA GGGTTTCTGA CCCAAGAGGT GGGGACCAAA ACCATGCATT CCTAAGAAGT CCCCAGGTCA TGCTGCTGTT  
GCTGGACTGA GGACCACACT TTGAGAACCT GTGCTCTAAG TGAATACITG GAAGTCGTTT CAGGACATGG GGCATAGAAA  
CTNAGGAGTA GCTGAGAGGA AAATNAAGAG AAGCTGAGAA GAAGCTGAGG ATCCTCACAG GAGCAGACAG AGAAATGTGA  
AGGGTT

SEQ ID NO:1648: (Length of Sequence = 338 Nucleotides)

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TCCACTCCAA GGGTTTCTGA CCCAAGAGGT GGGGACCAAA ACCATGCATT CCTAAGAAGT CCCCAGGTCA TGCTGCTGTT  
GCTGGACTGA GGACCACACT TTGAGAACCT GTGCTCTAAG TGAATACTTG GAAGTCGTTT CAGGACATGG GGCATAGAAA  
CTGAGGAGTA GCTGAGAGGA AAATGAAGAG AAGCTGAGAA GAAGCTGAGG ATCCTCACAG GAGCAGACAG AGAAATGTGA  
AGGGTGGGGT TTTATGINTG GGAAAGGGAC CCGAAGCCCA GGCTGAAGAG TTTTAACTTT GGGCCCAGAA ACTCAACCAT  
CAATGGAAAC AGGGCAGT

SEQ ID NO:1649: (Length of Sequence = 275 Nucleotides)

GCACCTINAG GATTGAGACC CGGAAGGCTT CAAAGGCTGT CGCAAGGAGG AAGAACTGGA AGAAGTTCGG GAACTCAGAG  
TTTGACCCCC CCGGACCCAA TGTGGCCACC ACCACTGTCA GTGACGATGT CTCTATGAGG TTCATCACCA GCAAAGAGGA  
CCTGAAGTGC CAGGAGGAGG AGGACCCTAT GAACAACTC AAGGGCCAGA AGATCGTGTG CTGCGGCATC TNCAGGGCG  
ACCACTTGGA CCACCGNTG CCCCTACAAG GATAC

SEQ ID NO:1650: (Length of Sequence = 270 Nucleotides)

AAAAGCCAGA GGGATGAGAA TGAGAAAGTT AAAAGGGAGG TCAGGAAAGC CATCTTTTAG GAGAAATATA AATNGACAAT  
SCTTTAAAAA AGGAGCTGCC ATCATATTAT ACCTGACCC AGCTGGATAC GAACAAATTC AGCCTTGGCA ATGCAAGTCT  
TACATCTATT TTATATAGAT TGTATAAAG AGAACTGGAA GCATTTTCAA GAGGGGTATG TATGTGTTTG TGTGTGTCG  
GTAATTAATG AAAGAGAGGC TATTGAATTT

SEQ ID NO:1651: (Length of Sequence = 372 Nucleotides)

TCTGCTTTT TAATTGTAAT TCTTAACACT AGAATTTTCT ATTTCAAGTT TTTGTACGTG GCCTTGCGTC TCCTTAGTAC  
ATTTTATAGT CGCTGTAAGT TGATTCCATT TTTCTTGAAA TTGAATTCCT ATCTGACCTA ATTTCTTCCT TGAATCCTAC  
ATCTCACTTT CTCAATGGAC GCAGTGACGC AATGAAGCAT CCAGCAAAGC TTTTGTGTTT GATTGTTTAG GAGTCAACCC  
TGTFTTTGTT GAAGTGTGCT CACAACACT TCTCTTCTG CTCTCTCTCT TTCAATTTGA CATTTGTTTT CTTTTCAAT  
GGATTAACIT TATTGATCAT CCTCTTGINC TTCTAGCAA AGACGGGTGC TT

SEQ ID NO:1652: (Length of Sequence = 314 Nucleotides)

TTTCTGAGTA TGCTGCACTG GATTATTAGC ATGTTAAATA GTCAAAGGGA CTGGAATAAA CATCAGGAAG ATTTCAATAA  
GTGGTGTAAG TAGAAAAAAG AGGTTAAACA ATGAGCTGCA TGTGTATAAG TATAAGACAC TGATCCAAGT GGTGGCTTCT  
GAACCATGAT ATTACTTAAN CTAGAGTGTT AAGGTCAGCT TAAGTCAAAA TAAACAAAG CTTCCAAACC CTCATTTTAA  
ACACAGTAGA TAATAGATGA NTCTTGATC TTGGGAGATA GTACAAGCCA AANGTTACAG CTGTGTTAA ACCT

SEQ ID NO:1653: (Length of Sequence = 323 Nucleotides)

TAGATATGAT GGCTGGAGCT GCAATAGCTA ACTTGCAACT ATGAGGAACT ATAGGACTTT GGTCTTAAAC TTCCTGAGCT  
CCTGAATCAA TACTTTAACT ACCTTCTATG AGACTTCTTG TCACATGAGA AAAATTAAGC CCCAAATTAA ACCCCTGCCT  
TTNACTGTAA CTCTCAATTG AGCATAATTC CTAAATGNTT TAATCAATTC TACTCTACTC TGGCATGATT TINAAGGCAT  
TAACCATAT TTCTTCCAA TCTAAAAAGG GAACTANIAC TTAAGTGAGT ATCTAGTATA CATCAGATAC TGTGTATATA  
GGC

SEQ ID NO:1654: (Length of Sequence = 352 Nucleotides)

ATCTTGGCCT GCAGGAACAT GGCAAGGGG AGTGAAGCAG TGTACCGCAT TTAGAAGAA TGSCATTAAG CCAAGCTTAA  
AGCAATGACC CTGGACCTCG CTCTGCTCCG TAGCGTGCAG CATTTTGCTG AAGCATTCAA GGCAAGAAT GTGCCCTCTC  
ATGTGCTTGT GTGCAACGCA GCAACTTTTG CTCTACCTG GAGTCTCACC AAAGATGGCC TGGAGACCAC CTTTCAAGTG

AATCATCTGG GGCACITCTA CCTGTGCCAG CTCCTCCAG GGATGTTTG GTGCCGCTCA GTCCTGCCC GTGTATTGT  
GGGTCTCTC AGAGTCCCCA TCGATTACA GG

SEQ ID NO:1655: (Length of Sequence = 325 Nucleotides)

AGGGTAAATT GTGAGACTGT TTGTATATAT TTTTGTMTA TAIGTTTTG TTGTGTAT GTTGTATNT TTATTATAA  
AATGATAGAT CTGTGGGTAG GTTCTGAGAA ATGAATAGCT TGTATTTCT TTTTATGAA AGAAGAACA AATGAAGTTC  
AAGTGAAAG TATCTCCAGA AAGTTTAACA TTTTCTTATT AACCACTCA TTGATTGGCA TGTGAAACTT GAGATATTTT  
ATATAGCACT TTTTAAATGA GGATCTAGCT TCACTNTATC ATACAACCAC ATTTAAAATA GCCAGGTCCA TGGTCATTAT  
AGGGG

SEQ ID NO:1656: (Length of Sequence = 285 Nucleotides)

GAGGNTAAT AGAATAGATC AAAGCAGAAT GCAGTGTGTT CATGTCATAG GTTGACTTCT CCAGGAAACC GACCCCAAGT  
GGAAGTTTA CATGCAGGTG GTTTATTAGA GAGTGATGTT GGAAGAACA CCTGTAAGN AAGAAGGGAG CCTGGGAAGA  
GCAGGNGAG AAGGTGAAC CTGATTCAC TGCAACAGAG TCCTAGGCTG AGTGCATGGG ATNCTGTAGA GTTGGGGATG  
GACCTTCAGA GATATTCCAA ATAGAGAAAG AATTCCTGTT TACTC

SEQ ID NO:1657: (Length of Sequence = 385 Nucleotides)

GACTTGACTT TGCTTTTTTC CCCCCAAGTA GAACATAATGC TAGCTTCCAG CTGAAAGTA AAATCCAGT GTGGAGTGAA  
TTTTGTGCT AATTATAAAC CTGTAACCA AACTCAGACA TCTGGTACTG GTCTTTGCAT TGAGATTGGT CCCTGTAAAA  
CCCCCTTAA AAGCATATTG CATTTAGTAC AGAGCTCTTT TTGAAATGN AGGCTGGAGA TGTGCATTTT TCACGGTGT  
AATCGGTGT ATCTTATTAG CAAGGAGATT GGGGGTTTTG AGTGTGCG TGGGTGGGT TCAAATTTGC CAGGGGAACC  
AGTGGGCAGG CTGCTAGCAA GGCAGTGAGG AAGCTCTTGG CAGCCAAATG GGGTGCAITT CAGGG

SEQ ID NO:1658: (Length of Sequence = 338 Nucleotides)

GATCAGGACC TCTTCTCCT CCCAACACTG CCCCAGAGC CCGTTGTAA ACGTTACCA GCACACTACT GGGCTGTTTC  
TCTACCACTT GATTGAAATG ATCCTTATGG AAGCACAAT GACTTCACTG TCACTAAATC CAAGGGACAA TTTTATGCT  
CTATTTTCT TCAACTCTCC AGGATGTTG AGAGCTGATC TTTCCCTCC TCTTGAGCCT CCTCTCCTGC CTGGCTTTTA  
GGGTCTCTG CTGACTTTTC TTCATTTCTA AACACATGIN CTCAGGGGT CCTCAGCCT GCAAGGCCNA TGCACTGGGT  
ACCCAGTCT GTGGGCT

SEQ ID NO:1659: (Length of Sequence = 346 Nucleotides)

AGTATGIGAA GTCAATCACT TTTTATATGC AGATAATATG CGACTTATAA TGGAAAGTCA CGTTTCAATA GCAAACAAA  
AAGCTATAAG TAACAAAGAA TAACAAAAC ATAAATGTAT AGGCTCTACA TAAAGAAAAC TATAATTCCA TAAAGGATCT  
AAAATAAAC GGTAAATGG AAAGACAAGA TGTGTGTGA GATACGAAGA ATCCATGATT AAGTTAGAGG ATTCTTGGAT  
GACAGTAGAG TAGAAAGCAC CAAGAATGAG TCTGTATACC CAGAGAACAC TTACGCTGGT AGGAATCTAT CTCATACAAC  
TATTATGGAG CTCTCAAAGT ATACTG

SEQ ID NO:1660: (Length of Sequence = 240 Nucleotides)

GATAGAAATG CAGCCTTCC ACTTGAATGC ACTGCCATAT TGTCAGCTG CATTCCTTAA GCATCACTTC TTGAGGCTT  
CAAGCTTCTC GGAATGTTT GATGACTTAA AGGGGAAATG AACAGTTGC AATNATGCT GTCAAGTTC TTTTGTGAA  
CCTCTATTG GACAATCAC AAAAAAAG AAAGCAGCTC ATTTCTAAT TCAGGATATT ATTTCTTTT AAAACTGGTA

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SEQ ID NO:1661: (Length of Sequence = 294 Nucleotides)

AGCACCTCCC CTGAGGGCCA GGCCTTGGAG AACCGGATGA AGCAGCTCTC CCTACAGTGC TCAAAGGGAA GAGATGGAAT  
 TATTGCTGAC ATAAAAATGG TGCAGATTGG CTGATTCAATC CTGGGOCCTG GCGGATATGC ATATCAACAT TTATACATGG  
 AACTGTGAGA ACATTGTGCC AATAATCATT TAATATATGC CAAATCTTAC ACGKCTACTC TAACTGCTC TAATGAAGTT  
 TCAGTGACCT TGAGGGCTAA AGATINTTCT TCTGGTGTAA GAGCTCTTTG GGCT

SEQ ID NO:1662: (Length of Sequence = 291 Nucleotides)

GATTTTCATC AGGCAAAATNA AAGTAACCAC AGAAACAATT CAGTAATACT ACTAAGAGAG ATTAACCTCC CACTGGCCTT  
 GGAATAGCTA AGTGCAATGA TTTTKGTGTA GTTGTGAGTT TTTTCTCTC ATTGATATTT TACGTATTTC TGGGGTAAAT  
 GTATTTTWA CATGCATGA ATGTGTAATG ATCAAGTCAG GGTATTTGGG GCGTCCATCA CCTTGAGTGT TTATCATTTT  
 TATGTGTGGT AACATTCCAA GCGCTCTCTT CTAGCTTTGG AATATATAGT G

SEQ ID NO:1663: (Length of Sequence = 345 Nucleotides)

GGCAGTGGGA CTCTCTGTGG ATAGACTGAT TCTTGTITAG AAACAACAGC AAAAGAAGA AGGCAGGAAA GAACTCCCC  
 GGCTCGGAGG AATGTCTCTG TGATCCCAT TCTTGATGGA GGGAGTGAAG AGGGGCTGG NCTTCGCCCG CTGCTCTCTT  
 GACAGAAACA GTAAGTACA CCAGGACAGA AGGCAGGAGC CCGAGAACT CACGGCGCTC TGCAATGCTT CCAGCCNNNC  
 ACCGCTCTCC AGCCACCCCT GGAGCGGCCG TGGGGAGGCG GCAGAGGGGG CTTTTOGGAG GGCCCACTAT TNCACACGT  
 CTTCTTTTNG ACACCCAGAA AACTT

SEQ ID NO:1664: (Length of Sequence = 334 Nucleotides)

GTAAATAAGA AAGTGAATA ATTCTATAA TGTAAGGTG ATAGAAGATA ATCATCAGG TCAGAATTAA GAGGTCTTGT  
 GGTTAGGAA GCATAAAAT ATGTAACMA TTGTTTATTT CACTCAGAAA ATAAAAGTAT TAATGAAAGG AGTTAGAGAT  
 GAACAGATTG ATACAAACTG TTCTATGGTT TACAGCTTAA AAAATAAAGG TACATTTAAT GCTATGCATT TTGAGAATAA  
 TGCTTTTAT GCINTTCTT TTACATATG TATCINTTTG TATTTAAGGT CAAATAGAT TGACATTACT AATTACTTCA  
 CTATTAATAA TTAA

SEQ ID NO:1665: (Length of Sequence = 310 Nucleotides)

TGTACINCIA TGAAGCATCC CTTCACATC AGATCAAAGA CATCTTAAAG CCAGAAATAA TGGAGGAGAT TGTGATGGAA  
 ACACGCCAGA GGCTTTTGGG ACAGGAGGGA TAAGGAGGTG CTCCAGAAGC ACGGGACTNT GGACCTTGCA GGAGTGAAGA  
 CTGTRATGTG TGGTCCCAT ATGTGGCTCA GCAAGACTC GAGAGATCAT CCGTTTGTCT GCATGACGG CCGTGTGACG  
 GCCTCCAGCC CACAGGCTG CTTTCTCTG TCTAACACC AAGCCTGGGT GGCAGATGAA CAGTGCTTCC

SEQ ID NO:1666: (Length of Sequence = 352 Nucleotides)

TTTTTTTTTA CATAAAAGT TTGGATTTT ATTGAAATCT TGTAGGTAT CAAACAAAT CTGCTTCTT CAGATAAAAA  
 TATTCTCTCA GATGTCTCCA GATAACTGCT AAGTCTAAT TGGTCTTCA ATGCTTAT TTTATGTCC TCGTGAAATG  
 TTCATATACA GTTAAGATGT TCCAAAAGG ATTTTATCG TGTAAAGGAG CGTACATGAC GACCTCTACC ACTGCTTCCA  
 CTAACAACT TTCTCTTGA GCTTCACTG CCGCTATTG CACTAGCCA GGGAAAGTCC AAGTCCCCCA CGACCTCTAG  
 AAGCACGGTT CCGAGGACT TTGGGGTAA CC

SEQ ID NO:1667: (Length of Sequence = 287 Nucleotides)

GACAAATATG CCGCTGCCA CATTTTGGT CATCTTTT TTTATTATGC TTCTCTTCT TGGACTGGAT AGCCAGGGAT  
 GTTTCANCTT CTCGCTGTC AAGTACGTAC CCTGACCTA CAACAAACA TACGINTACC CCACTGGGC CATTGGGCTG

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GGCTGGAGCC TGGCCCTTTN CTCCATGCTC TTNGTCCCT TGGTCATCGT CATCCGGCCT CTGCCAGACT GAGGGGGCCG  
TTCTTTGTG AGAGTCAAGT ACCTGCTGAC CCCAAGGGAA CCCAACC

SEQ ID NO:1668: (Length of Sequence = 300 Nucleotides)

CCAGACAAAT ACCAAGTTTA TTTCACAAAC ACTAGGAAGA TGGGTGAGG GTGGAGGTGG GGGACACAGG TGCGCANTGC  
ACAGAGTCAG CAGCAGCAGC CTGNTCCCG CACTGAGGAC TCGGCCTGGA CTGCAGTGCC TCCAAATCAA CACGCAGCAA  
GAGGGGAGTN CAGNGAGGGC CCTNAACACC AAGCCTCTGA AAGGCTAAGG GACACAGCTC CATCTGTCCC AGGAAAACCA  
GCAATAAATA AAGTNNNGC ACGGCCCCAC CCACACATAT CATCTAGTCA CCCATCTTCA

SEQ ID NO:1669: (Length of Sequence = 334 Nucleotides)

TTTTAATGAC AGATTTTCTT AAAAGAAACC ACTATAACAT CTGTCCAAGT ACTCCAGAGA AAACAAAAAA TACATAAAGA  
TTAAAGTCT ATTACTTTAA CAGCACATTG CCAACACCG ACACTAGGA TAAATGCCAA GAAACCTTAA AAAATAACTT  
TAAAAGATGC AACGTTCAAG CCATTCAAAC GCGTAGGTTT CACAAACAAC AGGNNACAA GTUCAAGAGC AGTTCTACTT  
GTGCATGATG GTAACTCAGA CTGTACTTCA TCAAAGTTCA TTCAGGTGTT TCATAGGCGT CTGAGCAGAG TTTTGTTTTT  
TTCTTTCCTT GCTT

SEQ ID NO:1670: (Length of Sequence = 287 Nucleotides)

GATAAAAGAG AAACAGCGAA GTTCAAGAG AAAAAGTTGA GGTCTTAATA ATTNTGGGC AACTTGACAG CAGAACAGGG  
TAAAANTGAG TTAGCTACAA AGGCTCATCA GAAATGGCA ATAGATTCCA GAGAGATTTA ATAACACTT ACAAACTCTG  
CTATAGGTGA CAAATCTGAC CATGATAAAA GCACCGTAAA TGATATAGGT AACACTGNC ATATGAAAAC TCAGACTGTG  
CACTAGATAA AAAGGAANCC CAGCATACAG TGTACCACA TGTAAAT

SEQ ID NO:1671: (Length of Sequence = 187 Nucleotides)

GATAAAAGAG AAACAGCGAA GTTCAAGAG AAAAAGTTGA GGTCTTAATA ATTTTKGGGC AACTTGACAG CAGAACAGGG  
TAAAANTRAG TTAGCTACAA AGGCTCATCA GAAATSGCA ATAGATTCCA GAGAGATTTA ATAACACTT ACAAACTCTG  
CTATAGGGTG GACAAATCTG GCCCATG

SEQ ID NO:1672: (Length of Sequence = 329 Nucleotides)

ACATCACAAC ATCGTTTATT ATGTGAATTT TTACAAATAC AAACAAAAAA TACAGAAATG CAATATATGA ATACAGCTAA  
ATGCAGAATG GTGACTTTT TCTTTCAG AGGCCATGAT TCCATTTCT AGTAAAATAA AGAGACTGCA TATAGGTAGA  
AACAGGTGG TCATTAGCTT CACAATTTG CCTAGAAATG ATCTATAAAT GCATTTCCCC CCTGCTACT TACCCTAAAG  
TGIAAAAAGG GAGTTAAAGG AAAGTTTCTT TGTGGTTCC TACCATATGA AAGATGCTAT ATTCTATTTT AGCAGTGCCA  
ATATATGGG

SEQ ID NO:1673: (Length of Sequence = 386 Nucleotides)

CTCCCTACTG TGATTCTCAT CAAGCTGGAA GCGTGTGAG AAAGCACTTC AGTTTCTTCC CTGGATATG AACCTGAGCT  
CTCTGATGAG GTGGTTTGA AGTGGCCCTG GGAGAAGCCC ACTTCTTGGT CACAAGATAC TGCAATCTCC TGGCAGATGA  
ACCAGCTGCT TCCAGCATCC TCTGTGTGG TCTCACGCC TAGCTGCTCT ACGTCTGGC TGCACAGTGG CATCATATG  
GGAAGTAGAA AAACCTCTGA TGCTGTCC CACCGGCTT AATCAGATG AGCTGCTT ATCTGGNCT GGGACCTAC  
CATCATTTTT TTAAAGAAT TGCAGGGGCC AGGGCGTGG GGGCTTCA GCTTCTTAGC AATTTT

SEQ ID NO:1674: (Length of Sequence = 377 Nucleotides)

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CTGAAATTTG GCAAGAAGGG GCAAAAACGT GACTATTAAT GATTGATAAG CACCAGTGAA GAAGTTCTAA CTTTITAGCAT  
 GCTGCACAGA AACTGGTATA ACATGCCTTC AGTATACTAA CACTCATATG CTCAGTTTIG TTTTGTITTTG GCAGTTGACA  
 AGAAGTTAAT TTGCTTTAGT AAAAATCCCT CATTCAGCC TTTCTATATA AATAGCTCTT TCTTGCTGTT TTAATGTGGT  
 GCACACTATA GCCTCACAAA CCTGTTATT CAGTGTAAAT TGCAGTGTG TAACTAAAGT TACTGGCTTG GGTCTTATTT  
 GCACAGTTTT TGCNCTTGT TTGCTTCTTG CATCTGGATT AACTAGGAAT ATTTCTC

SEQ ID NO:1675: (Length of Sequence = 381 Nucleotides)

CAGAAGTCAA TCAGCTACGC ACCCAGTTCT CAAAGACCTC ACATGCTAGG GAAGGTGCGG AGGCAGAGTT GTGGTTCAGA  
 AGCAGTTACA GGTCTCAAAG CAAGAACAGC AGCCAAAGCT TCCAGCCCT GACGCTGCTT CTGAATGGTA AACCAATGGC  
 ATATGGTATC CACAGCTAGG CTTTGCTTTT TTCTGAGTGA AGGTAAAAGG CATTTGAAAA TAAACCAAAG TTTCACAGAC  
 TATGTTTATG GAACAAACAT GGGCCATTTT CAGGGATATA AAAGTOSATG TTCTATGTAG GCCCCATAT GAGTATTTAT  
 CTACTTTTFA TTACTTTTAT TTTATGGAAT TTATTTGNCA AGGGGCTTCA CTCTGTTGG A

SEQ ID NO:1675: (Length of Sequence = 404 Nucleotides)

CTGTGTGAT TGCTTGAGCC CATCACAGTT TAGCTCTCAC AGCTTTAATT TACTAGCCCA TGAGAAGTCA GCTTCAAAGA  
 ACACCATTTT GACTCTCAA GAACATTATC AATGTACATG GATAGCTTCC AACTTCATAA GGTGTTTCTC TCTACCTAGA  
 GCAATTAACA TTAATTTGCA GAATAGTGT TATTGAAAC CTTTGIGTAT CTCACAACA GTAATAGTGT ATTGATTTC  
 TTCTACTAT CTCAACTGT ATCATTAGA GGAATTTCTT AGGNAAGTCT ATATGCAGTA AGCAAGTAAG ATCGCAGAC  
 ATCAAGGGN GGAAGTAAAT CCCAAAACG GNTTTTACCT TCCTTCCCT TAGGTGAGGG AAAGGAATTT ATGTTTAA  
 AGCT

SEQ ID NO:1677: (Length of Sequence = 388 Nucleotides)

ATGGACAAC ATGAGCCAGG AGTCTACACA GAGAAGGTTT TGGAGCCAC TAAGCTGCTC TCCAACACAG TCATGCCAG  
 TTTTACTGAG CAAGTAGAAG CAGCGTGA AGCCCTCAGC TGGGACCTG CCCAGCCAT GGATGAGAAT GAGTTTATCG  
 ATGCTTCCCG CCTGGTATAT GATGCCATCC GGGACATCAG GAAAGCAGTG CTGATGATAA GGACCCCTGA GGAGTTNGAT  
 GACTCTGACT TTGAGACAGA AGATTTTGAT GTCAGAAGCA GGACGAGGT CCAGACAGAA GACGATCAAC TGATAGCTGG  
 CCCAGAGTIG CCCGGGGCGA TCATGGCTCA AGCTTCCCA GGGAGCAAAA AAGCCGAAG ATTTTCGG

SEQ ID NO:1678: (Length of Sequence = 428 Nucleotides)

TAACTGTGCA AATAATCCAT GAATATATTG TTTTATACA GCATTACAGA TAAGGCTTGC AGCTCTATAG ATCACCCTCA  
 TCCACTCCTT CACTOCATTG CTACACTTAA AAGCCTCACA TGCTCTCTG TCCTCTCCA AGGCAGCTGC TAGCATCAGC  
 GCCCACAGTA GCTTCTTTT GTTCTCTGTT TATAAACCAT ACAATTTCTA TGGCTACACA TACGTGTATT GTTGTATGCT  
 TTCTAATAAA ATTGTATCAT AGTGGTACAC ATCTTTCACA CTTTCTNAT TACAGTCAAC ATTTGGNGGA ATACAGAATG  
 CAGCAGATCA AGGANTTTT CTGAGTCTT TCTAACATGN CCCAAATAC AGCCTCACTA TGGGGTCCAT TTAGNGGCT  
 CATTTGTTTT CACTCTACA ACGGTGGC

SEQ ID NO:1679: (Length of Sequence = 256 Nucleotides)

GGTGTCCACA GCTGCTGCC TGGCCTGGAG CAAATACCTT TGTTAAGTGC TCAGAGGGTA TGGCCCTCA ATCCACCCT  
 GTAGCTCCCT GGCTCAAAT AACTCACTC CATCTTTCA ACTGCTCC TGAACCCCTG GTTAAATTTT CACTTAA  
 CCTCAGTGT ACAAGCATT TTCAATTGAA TACAAAGGC AACTINGCAC CANATGGCA TCCTTGAGCC ATGGTAAACA  
 CTGAATTTNA GGCTCA



SEQ ID NO:1680: (Length of Sequence = 438 Nucleotides)

TACCAAGTAGT TCCTTTCCCG CTTTATTTTT TAGCTGCTTT TTGGGTTTAA TACAATGAAC ATGTATTAAT TGTAGAAGAA  
AACGATGTCA TCCTTTATGA TAAATCCAT TTCCATTTTA GCTTTTTTAA AAAAACAAAA AGCTGTTGTG GACAGATGAA  
CATCCAAGTA CTGGGCACAC CTCAGCCCT CCTCTTCCA CTGAAGGCCA TTGCCTATTC CTAGAAAGTT CTTTCCCAGG  
TATGCAGCTT TCAGTTTCCA CTTAGAGGC CACAGTGTCT GGGGGAACGG ACTGCCCCCA ATACTAAAGG GAGTCAAAAT  
CTCTTTAATT NCCGCACTTC CTCAGTACCA ACAAGGAAGT CCTTCTTTA GGGCCACTGG ATGGGAACCT NGGGACCCCC  
CTTTTTTGAT TGGCAAGCAT TGGGGTCTCT AGGGCCTT

SEQ ID NO:1681: (Length of Sequence = 370 Nucleotides)

GTCTGGGAAG GGTACAATGT CGTCCGGGCC TGAGGGCCA TGATTGGACA CACCGACTCG GCTGAGGCTG CCCCAGGAAC  
CATAAGGGGT GACTTCAGCG TCCACATCAG CAGGAATGTC ATCCACGCCA GCTACTCCGT GGAGGGGGCC CAGCGGGAGA  
TCCAGCTGTG GTTCCAGAGC AGTGAGCTGG TGAGCTGGGC AGACGGGGGC CAGCACAGCA GCATCCACCC AGCTGAGGC  
TCAAGCTGCC CTTACCACCC CATCCCCAC GCAGGACCAA CTACCTCCGT NAGCAAGAAC CCAAGCCCCA ATTNCAAACC  
TTGCTGTINC CAAACCACTT ACTTCCCTGT TNACTTTTG CCCCANCCCA

SEQ ID NO:1682: (Length of Sequence = 397 Nucleotides)

ATGTAATCCG CTGCACAAA CACACCTTCA CCAACCACAT GGTTTTTAAG TTGACTGCA CAAACACACT CAATGACCAG  
ACCTTGGAGA ATGTNACAGT GCAGATGGAG CCCACTGAGG CCTATNAGGT GCTCTGTAC GTGCCTGCCC GGAGCCTGCC  
CTACAACCAG CCCGGGACCT GCTACACACT GGTGGCACTG CCCAAAGAAG ACCCCACAGC TGTGGCCTGC ACATTCAGCT  
GCATGATGAA GTTCACTGTC AAGGACTGTG ATCCCACCAC TGGGGAGACT GATGACGGAG GCTATGAGGA TGAGTATGTN  
CTGGGAAGAT CTTGGAAGTT TACTTGTAGC TTGTTACAT TCCAAAAGGT TCATGGAAC TGAACCTGCA GCAGCCT

SEQ ID NO:1683: (Length of Sequence = 396 Nucleotides)

GGCTGCGCAG AGGAGCCGCT CTCGCCCGC CCACCTCGGC TGGGAGCCCA CGAGGCTGCC GCATCCTGCC CTGGGAACAA  
TGGGACTCGG CGCGGAGGT GCTTGGGCG CGCTGCTCCT GGGGACGCTG CAGGTGCTAG CGCTGCTGGG GGCCGCCCAT  
GAAAGCGCAN CATGGCGGCA TCTGCAACA TAGAGAATTC TGGGCTTCCA CACAACCTCA GTGCTAATC AACAGAGACT  
CTCCAACATG TGCCTTCTGA CCATACAAAT GAACTTCCA ACAGTACTNT NAAACCACCA ACTTCANGTT GCCTCAGACT  
CCAAGTNATA CAAACGGTCA CCACCATGGN AAACCTTACA AGCGGGCATT TTAATTNCAA ACANCAACCA GGGGAT

SEQ ID NO:1684: (Length of Sequence = 417 Nucleotides)

ATCCAGGGGA GATGCATGTG GAAATGTGGT CCTCTGGGGT CAGACCCCTG CACGGGACAT CTGCCTTTN AGTGTGCAGA  
GTACATGGGG AAGGGGCTGG GGGCACCCT GTGTACCTGG GCCAGTAAG GCATTTGCCG TGATTTCCAC AACGGGGTCA  
AAAGCTGGCC TTCAGGGTGA CCTAACACCA CCTCATGCC TGCTATAGAC CTTACAAAC GACTTCCACT GCTGAAGCCT  
GTAGGCTCTG TTTAGAGACA AGAAGATGGC TGGTAATTTA AGCACCATT TCCCAAGTGC CCACTCTCCT TTGTGCTCTG  
TTGGCTTTTG GCCTAAAGCT TNNCCAGAG TTAGGGTGTG GGATGTCTGT GGCTGTGAG ATGCCTTTCC CTTCCCCCT  
CTGCTTCAAC CGTGGTT

SEQ ID NO:1685: (Length of Sequence = 429 Nucleotides)

GAGCCATGGA GAACTCTGAA AGGAAGAATC GCTACTTENC TCAAGCAAAT CGGTTTCTTG ATGCTTTTG GTTCTCCTTG  
CCTGNCCTG ATGCTTGGNC CCTTTTAATT GATCAGAGTG CTCTAGAATA ATGGATGGTC TTGGATGATG GATAAATAGG  
GACAGGGACA GTTAAATTGG GAGCCTTTCT TACAACCTTN ATGGGATTTT CCCCCCAAG TTCTCTCTC CACTGAAATG  
CCACACTAAT GCTTGTGGG ATTCATGAGG TGGCCAGACC AATGTGTGT TTGTGTGTG TTTTTTTTTT AAGCTTCCCT

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TGAGAGAATA AATGGGTAAT GGGAGGAGAA CTATTTTAAC AAGGGTCCTG GGTTTCTCTT TGCAACACA GTAGGCTTAA  
ACTTTGCCCTG CTTTTTAAAA TGGCATTTT

SEQ ID NO:1686: (Length of Sequence = 445 Nucleotides)

TGTCCTTCATA ATATAACAAC ACTAATACAC TAATAGTAAG ATTAAGTTAG GCAGTCTTCT ACCAAATGTG TAATGGAGAT  
TGCCCTCAAAA TTGTGTCCAC ATAATCCAG CTCATCTGTC AAAGCGCTAT TTCAGGCACT TTTTTTTGAG AAAGAGTCTC  
ATTCTGTGCG CCAGGCTGGA GTGCAGTGGC GCAATCTTGG CTCACAGTAA CCTCTGCCCTC CCGGGTTCAA GCGATTCCCC  
CGCCTCAGCC TCCCGACTAG CTGGGACCAC AGGCACGNAC CACCACGNCC GGCTCACCTT TGTATTTTTA AGTAGAGATG  
GGGGCTCAC CATATTGGGT CAGGCTGGGT CTCAATCTN CCTGGACCTC ATGNTCCACC CGCCTTGGGC CTNCCAAAAG  
TGCTTGGGGA TTANAGGGAA TNGGGCCACC GGGGCTTGGG CCAAT

SEQ ID NO:1687: (Length of Sequence = 170 Nucleotides)

AAAAACCAA TAAAGCAATA ACTTTAAGA CCTCAGACAC ACACAGTATA AACACCTGGG TAAGGTTTIN TCCGTGTCCA  
TGTTGACACC GGAACIACCG TAAAGTGCA AGTTTGTIT TGTTTCCTT TGTGCAGTTT CACTCACATG TAAACAAGTC  
ACTTGGCTAT

SEQ ID NO:1688: (Length of Sequence = 386 Nucleotides)

AATGTGATTT GATGTTAACA CTAGAGAATG ATGACTGTAG AACATTGAG CAAGTAAAT AGTAAAGCAC ATAGTGAGTG  
TATGTCCATC TAACTGGTAC ATTGATAATT TAGTTTGGGC ACATAAAGG AATATTTATA TGGCTTCCCA AATGCAGAGT  
TACATCTTAT TCGTGTATTT CTCTGAGTAT TTATATCCCG TCTCTTTTTC TCATTCTTAA AAATAAATGA ATTTTCACTG  
TTGGCACATA TGAGGCTTAA ATATAAGGAG CATAACACTT GCATTCTAAT TTTTGCATAT ATTGTAAATG TGTCTGGTAT  
TTACAGCAA ATACTGTGTA TCCTTTATGG GTAAACAAAG TGACATTGCA TGATGTAAAT GTGATG

SEQ ID NO:1689: (Length of Sequence = 400 Nucleotides)

CTTCGTGCGG ATCAGCGTAT TCCTAGATTA GGAATTCAA TTAATGAAA TTACATATG AAAGGAAAT CCATTGCTAT  
TTCTGGAGAG GACCTCAGTC CTGGGCTTTT CCTGGCATT GCTACCTGGG TGGGTGCTCA CCACTCAGGT GCTGGTGTG  
GAAGGCAGGA GGAGGAACCT GAAATCTGCG CGATTAAAGC TAATTAACAG GGTTTAGGTG CCTAATTATC ATGACTCAGC  
CCGGGACTTA TGGTTAGCCG TGCAGGCCAG GTGAGTCTCT TATGGACTTC CTCACAGACT GCCTTTCTC ATTTTGTCTT  
GATGAGATAT TGACAGTCAT GTCCACCGC TTCCTCATCC ATTTCCCGTC TTTGGGCCCT GGGAGTACG GGGGCTCTG

SEQ ID NO:1690: (Length of Sequence = 337 Nucleotides)

AGTATATAC CTTTAAAGT AACTAATGCA ACTGCCAAN AGGACAGTG TCAATATCAT TGINTTCATT AGAAGGACCG  
CTGCCCCACA CTGTNAGAAC ACTGCTGTTC CTAACAGTAG TTTACTTTNA GAGGGATGTA AGAATTAGTT TNACCTTAAT  
TCCAGATGTG CATGCCITCA AAGAAAAATC CCATTCTCCT TCCTTTTGGG GAGCACTTTT GGTGGCACCA AGGCTGGTGT  
GGGGTAGTGG AGAGAGCACT GAGCTTAGAG TCACAACCAG ATGAAACTGC TCTGGTCTTC ACTAGCTGTG TGACTTGGGC  
AAGCAGCTTG CAGTCTC

SEQ ID NO:1691: (Length of Sequence = 372 Nucleotides)

TCATTCTCCC AAAGTGCTGG GATTATAGGC GTGAGCAGT GCGCCAGCC TTACTTATTT TTAAATCAGA TTTTAAATC  
AACTPAAACA GCTATGAGTT AAGTACCTGC CCGCAAAA TTTTAAAGG AAGTTTGGG ATTATTAATG TATGATATT  
TTTCTTAAC TGGAACAGTT CTAATAATTA TCTGATCTT CTCTAACAG TGATGATCT CATGTAACCC CAGTTGTAT

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CTTAAAGGCT GCAGCATAGA ATTGAGCTGT ATAACAGTGT TAGAACTGTC AAGTGATAAT CACAGAACAG TTTGTATCGG  
TTTTATAATT CTCATGTCTT GATCAGATCT GAAGGGAATA GGCATACCCT CC

SEQ ID NO:1692: (Length of Sequence = 360 Nucleotides)

TTTTTTTGGC AAAAATAGTA TATATTTATT ATGTACAACA TGTATTTTGA GATATGTATA CATTGTGGAA TGTCTAAATT  
GAGCTAACAA ATACATTATC TCACATACCA TGTTTTTTTG TGGTGACAAC ATTCAACAAT ATAGACCATT TCACAAATTT  
GCATGTTATC TTTGTGCAGG GGCTATGCCA ATCTTCTCTG TATTTTINCA ATCTTGGTGT ATGTGCTGCT GAAGCACACA  
CCCTAATTCC TTTCATTTAA GGNCTAGTT AACCTTTCTC TTAAGTATAA CCATGTATTT TGTTAAGCAA TATCTTTTTA  
TTACAAAAT GCCATTTTTT TCTGGNTAGG AAAATTGATT

SEQ ID NO:1693: (Length of Sequence = 378 Nucleotides)

GACAAAAAGA GGGGTCTGGC TGCCGATGTG GAAATTTGTT TTTGGACTT CACCGTTACT CTGACAAGCA CAACTGTCCG  
TATGATTACA AAGCAGAAGC TGCAGCAAAA ATCAGAAAAG AGAATCCAGT TGTGTGGCT GAAAAATTC AGAGAATATA  
AATTACTTCT TGTGAAGAGA CTGAACTTT GTTTTTATTT TAATATATCG TAGGAAAACA TTAAGAGCA GATGCATGGC  
CATTITNCTT TGATGTTCTC CAGAGTTTAA CATTACACTT GTCTGTCTTA TAATTGATAT TTTAGGGATG TTTGGGTGTT  
TGTTACAGGC AGAATTGGAT AGATACAGCC CTACAAATGT ATATGCCCTC CCCTGAAA

SEQ ID NO:1694: (Length of Sequence = 362 Nucleotides)

AATGCACITT ATTGGCTCCC AGGGAGTGGG ATGCAGGATC AGAGTGGACA CGCGCAGGGG GCTGGTGTGG GGAGCAAAGC  
NCCGGGCTG CCCCGGACCC TGGTTTCCCT GAGGACCAAC GTGAATGGGG GCCCCTGAG AAAGATGCTT GGGGCTGCAG  
AGCGGATGGA ATGCAGGCCC AGGTGCTGCG GTGGTGCCCT CAGCTCCTGG CAGGGTTGAC GGGTGGTGGC CGCTGGGCTC  
TGCCAGCCGA TGGTCCNCTG GCACCTGATC CTGTCTTCCA GCTTCACTTC CGGGCCTGCT CGTAGTTGTC AGTGAACCAA  
GCACAGGTCT CTTGACCGN CTGCTTINAA GGGTGTGAAN CG

SEQ ID NO:1695: (Length of Sequence = 411 Nucleotides)

TTAATACAAG GGGTTTGAAC TGGACATCCT AATGATGCAA TTACGTATC ACCCAGCTGA TTCCGGGTGG TTGGCAAAC  
CATCGTGTCT GTCCTGAGAG GCTCCACAAT GCCACCCGC ATCGCCATTC TGTAGTCTTC AGGGTCAGCT GTTGATAAAG  
GGGCAGGCTT GCGTTATTGG CCTAGATTTT GCTGCAGATT AAATCCTTTG AGGATTCTCT TCTCTTTTAC CATTITNCTG  
CGTGCCTCA CTCTCTCTT CTCTCTCTAG CTTTTTAATT CATGAATATT TTCGTGTCTG TCTCTCTCTC TCTCTGTGTT  
TCCTCCAGCC CTGTCTCGG AGACGGTGT TTCTCCCTT GCCATTATC TTTCAACTC CCAGGGCTAC CCATTTCAT  
GGTGGGTGCT T

SEQ ID NO:1696: (Length of Sequence = 280 Nucleotides)

CTTTGTGATG TTTTACGCT TTACAAAAG CAGATTTGGT ATTCAGAAAA GCCTGCAAAT ACAACATTGC TTAAGAGAAC  
CTGTAAACAC GTTTGGAATA CAATGCAACA CAAGTCAGCA AGGACAGGGG TAGGTCCAAA GGAGCCAGCT AGGGGGAAAG  
GTGACAGAAA AGGAGAGGGA AGGATGNGA CAGACATCAC CTGTGGTCTC TAAGGGGGCC NTGTGTTTAA TTTATAAGGT  
TTNCTNCCCA CAGGAGTTCT NNVTGATCT ATCCGTTTAT

SEQ ID NO:1697: (Length of Sequence = 418 Nucleotides)

ATTTCTTCAT TTACAAGAGG AATATATTG GCTTCTCTCT TAAGACTCTC AGATTACAA TCAGCAGCTC TAAAAAATAA  
AGGAGCAGTT TGGCTTCCGG AAGGAAGAGG AGGCAACACT CGGACCTGGT TCTGTACAA CAAGAAAACA TCGCTGGGGC  
CCCCTGAGG CTGGAGTGGG GGTGGAGGCT GGTCTTTGGA GGATGCCACC CCCACCCCAT CCTCTGTCA GGCCCTCGGG

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GTACCCAGAG GCTTNGTGGG TGAGTATTCC ACCTGCTTAC ACACCACTGA AGCCACAGCC AGCCAGTAAC TAAGGGGGCAA  
GAAAGAGCAT TGTCAGAGCT GGCTCTTNG GGGGGTCCCC CATNGGCCA CAAAGGCTC ACCCCCCACC CCATCCCCGT  
AACCAGAAAC CACCTTGA

SEQ ID NO:1698: (Length of Sequence = 376 Nucleotides)

ATTTTATTG TTTATTTACT TATTTTTTAC CCTTTTTTCA AGAGATGGGG TCTCACAGTG TTGCCAGGC TGGACTTGAA  
CTCCCACTCC TGGGCTCCAG CAGTCTCTCT GCTTCACCTT TCCAAGTAGC TGGGGCTATA AGTACACACC ACCATGCCCA  
GCAATATTTT AATTTCTGTA ATGTGTCAIT TAGCCAGTGA TTGTGTATTT ATAATAGAAT CACAGAAATG GAGGGACTCC  
TAGAGGTAAAT CAAATCTGGT GGTTTTTAAG CCTTTTATTC CCTCTAAAGG GATAGTAAAA CCATTAAAAA TATAATTTTT  
CCCAATTATG TAAGCCAGRG AAAGCTGACC TYCTGGTTTA GAGAGGAACA CAGATG

SEQ ID NO:1699: (Length of Sequence = 365 Nucleotides)

GGTACATGTG CACAACGNG GNGTTTGTTA CATATGTATA CATATGCCAT GTTAGTGTGC TGCACCCATT AACTGTTCAT  
TTAGCATTAG GTATATCTCC TAATGCTATC CTTCTCTCT CCCCTACGC CACAACAGTC CCTGGTGTGT GATGTTCCCC  
TTCTGTGTG CATGTGTCT CATTATTCAT TTCCACCTA CGAGTGAGAA CATGCTGTGT TTGTTTTTTT GTCTTTCGGA  
TAGCCAGATG CAGCTACTCT TAATGTGCAT ATTTTCATCC TAGAACATG GAGAGTTCT GTAAAAGCCT TGTGTTCAG  
GAGGAAGGAG ATCTGACCC TTGTGCTGAT GGCAGCAGTC AGGGG

SEQ ID NO:1700: (Length of Sequence = 397 Nucleotides)

AAAGGCAGTC AAGCAGGAGT TAAACAATAT GGACCTAACT CTCCTTATAT GAGAACATTA TTAAATTCCA TTGCTCATGG  
AAATAGACTT ATTTCTTATG ATTGGGAAAT TCTGGCTAAA TCTTCCCTTT CACCTCTCA GTATCTCCAG TTAAAACT  
GGTGGATTGA TGGGGTACAA GAACAGGTAC GAAAAATCA GGCTACTAAT CCTGTGTCTT ATATAGATGA AGACCAATTG  
CTAGGAAGAG GTCCAAACTG GGACACTATT AACCAACAT CAGTAATGAA AATGAGGCTA TTGAACAAC ATAG AGTA  
TTTGCTCAG GGGCTGGGA AAACATTCAG GACCCAGGGA ACCTCATGCC CTCTTTTTAG GTTCAATCAG ACAAGGT

SEQ ID NO:1701: (Length of Sequence = 245 Nucleotides)

GTCTAGGAGG AGGCCTTCTG CACAGAGCCC CTGAAGAACA CAGGCAGAGG CCCCCACTT GGCCTCTACC ACGTCCAGAA  
CATGCGAGTG GAGGTGACCA AGTCTTCAT TGAGTACATC AAGAGCCAGC CCATTGTTTT CNAGGTCTTT GGCCACTACC  
AGCAGCACCC GTTCCGNC CTCTGCAAGG ACGTGCTCAG CCCCCINAGG CCTOGCGCC GTCACCTCCC TCGGGTCATG  
CCTACT

SEQ ID NO:1702: (Length of Sequence = 349 Nucleotides)

ATCTGTTGTC AGCAGAGTTT TATTTGCTGT GGAATCCATG AGAGCCGGAA GCATGTTGG GGCCGTGGCT AGCAGAGCTC  
ATGGTGACCA GTCTGGGGC TGACCAATGG GTGATTACAT TAAAAACCA AAACAAAACA AAACAAAATA CCAAGAACAG  
ATCACTTGCC ATGGACATCA GTAACTTATT GGTAAATGGT AAAATTTTAT GAAAATTTCC CCTAAACCAT AACAAAACT  
GTCTCTCTTA CCCCCAAAGT GCTGGAGGGA AAGATGGTGT CATGGCTTTG AACTCTCTTT GAAGTTGAAA TGCTACCTTC  
CTACCCGGAA AATGCGGCAC ACTATACTT

SEQ ID NO:1703: (Length of Sequence = 419 Nucleotides)

GAGCCCTGTC CCTCCAGAAG CTCACATCTT CTTACTCATG GCAGACAAAT AAGGTCTAAT TACACTGAG CAGAGTTAGT  
GTGGCAGCAG ATGTAGTATG CAGTGACAGG GTGGCCATGG TTGCNAGGCG AAGGAGGCTT TCTTAGCATG GGGTTATTT  
GACCAGAGGC TGGCGGTGGC TTTTGTAGC AGTGTGATG TATCTGAGC CAGGGACAGA TACCTCTNTG AGCCTTGGTT

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TCCTCATCTG TAAAGTGGTT AAAGACTGAN TAAAGCAAAA TATGTGCAAA CAGTCTGTGA ATGGGGAAGT AACAGATGTT  
GCTTTCTATT ATGTTCTCTC CTAGCCATGA ATATCAATTA TTTAGAAAT GAAAAGGGAT CCTGCACCCA ATTTCAAATC  
AAGCAAGTTC ACCTAGAGG

SEQ ID NO:1704: (Length of Sequence = 372 Nucleotides)

GCTTCCCGAA GGTCTTGGAC GAGCGCTCTA GCTCTGTGGG AAGGTTTGG GCTCTCTGGC TCGGATTTTG CAATTTCTCC  
CTGGGGACTG CCGTGGAGCC GCATCCACTG TGGATTATAA TTGCAACATG ACGCTGGAAG AGCTCGTGGC GTGCGACAAC  
GCGGCGCAGA AGATGCAGAC GGTGACCGCC GCGGTGGAGG AGCTTTTGGT GGCGGCTCAG CGCCAGGNTC GCCTCACAGT  
GGGGGTGTAC GAGTCGGCCA AGTTGATGAA TGTGGACCCA GACAGCGTGG TCCTCTGCCT CTGGGCCATT AACGAGGAGG  
AGGAGGATGA CATCGCCCTG CAAATCCACT TCAACGTTCA TCCAGTCT TC

SEQ ID NO:1705: (Length of Sequence = 426 Nucleotides)

GATGCCTTAT TTAGTCCATT TGGTGAGGTA ATGTTTCTTT GGATGTCCTT GATGCTTGTA GACATTTGTT GATACCTGGG  
CATTAAAGNG TTAGGTATTT ATTCCAGTCT TCACAGTATA GGCTTGTTTT TAGCCATCCT TTTTGAGAGG ACTTTCCAAG  
AATCAAAAAG GGATTGAGTG TTGTGACCTA AGCCTATGGT CACTGCAGCC ATTTTCAGCAC TAGAGAGTGC CTTAAGCCCC  
GGAATGCTGC AACTCTTACA GACTCCTTGA TACACAGCTT TGGTAGATTT TGGGAAAATA AGGGAGAATT CCTTGGGGTT  
ACCGAGTAAA AAGTCTCTCC CACTTCCCTC TCTTTCTGGC AAAGGAAGTC AGTCTCTGCA CCAGGCTGCC TGGAGTTTGG  
GGGAGGGATA AGCGGGTCAC TCTAAT

SEQ ID NO:1706: (Length of Sequence = 412 Nucleotides)

ATTTTATTTT CTTACATCGA AGAAAATGTT AAAGAGTATC TNCAGACACA TTGGGAAGAA GAGGAGTGCC AGCAGGATGT  
CAGTCTTTTG AGGAAACAGG CTGAAGAGGA CGCCACCTG GATGGGGCTG TTCCTATCCC TGCAGCATCT GGGAAATGGAG  
TGGATGATCT GCAACAGATG ATCCAGGCCG TGGTAGATAA TGTGTCTGG CAGATGTCCC TGNTCGAAA GACCACTGCA  
CTCAACAGC TGCAGGGCCA CATGTGGAGG GCGGCATTCA CAGCTGGGCG CATGAAAGCA GAGTCTTTTG CAGATGTAGT  
TCCAGCAGTC AGGAAGTGGG GAGAGGCCCG AATNAAGGTG TACATCTATT CCTCAGGGAG TGTGAGGCA CAGAACTGT  
TATCGGGCA TT

SEQ ID NO:1707: (Length of Sequence = 434 Nucleotides)

GTGTGTCTGC AAAAAAAAAA AAGATTCTAG GCATGGTGGT GTGTGTAGCTG TAGTTCCAGC TACTCCAGAG GCTGAGGTGG  
GAGGATTGGT TGAGCCTGGG TGGATGAGGC TGCAGTGACC CATGATCATG CATGGGAGAC AGAGCAAGAC CTTGTCTCAA  
GAAAGGAAAG AATCACTGG CTCTTCTGTA AAAAATGATC TGTTAAGAGT AATTGAAAAA ATAAATACAA GTAATAAAT  
AATCTTTCAT TTAAGAAATA CTACCAAAT TAACATGGAG ATCTAGCAAA AAGTCAAAAG CAGCTNGGCG TGGTGGCTCA  
CACCTGTAAT CCTACACCT TGGGGAGGCT GAGGCGGGAG GNTCGCCTGA GGTGAGGAGT TCGAGACCAG CCTGGCCAAC  
AGAGCCAAGT CTCTACTTAA ATACAGATTA GCTT

SEQ ID NO:1708: (Length of Sequence = 440 Nucleotides)

GGACCAGGAC TCCAGCACCT TCCCTGGCTG CATCAACAAT GCCACACTCT TTCAAGATGA GATAAACTGG CGCCTCAAGG  
AGGGACTGGT GGAAGGCGAG GATTATGTGC TGCTCCAGC AGGTGCTTGG CATTACCTGG TCAGCTGGTA TGGTCTAGAG  
CATGGCCAGC CACCCATTGA ACGCAAGGTC ATAGAGCTGC CCAACATTA GAAAGTGGAA GTGTACCCAG TAGAACTGCT  
GCTTGTUCCG CACAATGATT TGGSCAAATC TCACACTGTT CAGTTCAGCC ATACCGATT TATTGGCTTA GTATGCGCA  
CAGCTGGGA GCGGTTCTG GTGGAGCCCC AGGAGACAC TCGCTTTGG GCCAAGAACT CAGAAGGCTC TTTGATAGG  
TTGATATGAC ACACACATCA CGGTTCTCGA TGCGGCCCTT

SEQ ID NO:1709: (Length of Sequence = 404 Nucleotides)

TTTGTCCTAT GTAGAATTGC CTATAGTAAG AAAACCCAGT AGAGAAAGTG GTTTTINAGAC CATTCGGCAG CTGCTTTGGA  
CACCTGGAGC CATTTCCTTT ACAGATGAAG ATGCATTGIG TCATTGTCTC AGGATCCTCG TCCTGTGCT TCTCTGGCCA  
CAAATGTTC TTTACCAAAG ATGATTTTAT TTTACTGTCT TTGAAAATCA TTTCTTATAG GTAGAATATG AAGATTCTCT  
GAAATGATTC CAAAATGCCA AACTCAAACA CTATTGTCCG ATTCTTTTAC TTGCAACAAG AGAGTAGAAG GGACAGTATT  
TGTTTTGTGA TGTTGGGGCG TTCATCAGGG AGAGAATTG AGATAAGTAG GAATAGCAA TAGGAATAGT GAAATAACCT  
AGAT

SEQ ID NO:1710: (Length of Sequence = 187 Nucleotides)

GGTGATCTGC CGACCAGAGG CCTTAACTC TGGTGTGAG TACTACTGGG ACCAGCTGAA CGAGACGGTC TTTACTGTCC  
ATTCCAACAG CAGGAGCAGC GAGCGSCTGG ACCAGGCAGA GCACATGGAG GACAGCAGAG ACATGGGCTG ATGAATGCAT  
TGGGCCTCAG CCGACCTGCA CTCAGTG

SEQ ID NO:1711: (Length of Sequence = 313 Nucleotides)

AGGGGCATGT NATCATTINA ATGATGINAT CTTGGTGT TCCCTCATTA GCTGTAGACT ATCCCTCTC CTCCCACCAC  
AATGTTCTA TGATGAGTTA CAAACAGAAA GGAAATCACA TTTTCATACT AAAAACAAAA TGATCAGAGC CTTGATTCT  
CCACTAGAAA CTACACGTAC AGTTAAGAGT CCACATGCAA CACCTTAAAT CACAGACTGA GGACCTCACA TTCTGACCTG  
GGAGTCTCT CCCCCTCCCC AGCCTTGGGC TAGCTTTGGC CTAGGCTCAG GTAATACTGA CCCCCACAG CGT

SEQ ID NO:1712: (Length of Sequence = 202 Nucleotides)

TTTTGGTGGT TTTCTCTTA TTGTGTGCTT CCTACCTTCC CCCACAATT CAGTCCCTTC CAACACCCCA AAAAGAAGGA  
GTGAAAGGAA GGGATTGCTG GGGTTCTGAG CCTTGGCAG TCAGAAGGAC AGAACCAAAC ATCACTGGAT GTGACACAGC  
TGCAATCAAGA AGTCTACAGC AGTATGGGAA GCGGCAGAGA AG

SEQ ID NO:1713: (Length of Sequence = 253 Nucleotides)

TGATTCANTG GGTCTGGGAT AGAGTCTGGT ATTCTGCATT TCTGACTAGC CTCCAGGTGA TACTGATTCT CCTCATCTAG  
GGACCTCGCT TTGAGTAGCA AGTGTITAGG CCACTTACTA GCAGGAACCTA AGCAGATAT CCTACAACAG CAAATGTCTT  
TCCAACAAGA AAGACGAGAG CAAATNCTGA TGCCACATCT GCACTGCCTC AGAAAATAAA GAAGGGATGA GGAGCCCCC  
AGTGGCACTC TGT

SEQ ID NO:1714: (Length of Sequence = 299 Nucleotides)

GGTGACGCTG CTTTGAAAAA TGACTTGGCA GCACCTCAA ATGTAAACA GAGTTACCAC ATGACCCAGT AATTTACAC  
TTAAGGATAT ACTCAAGAGA AATGAAAAC AAAACATAC GGCTACCCAA AACTTACAT AAGANTGTTC ACAGCAACAT  
TATTATAAT AACCAAAATA TGGNAACAAC CACAATGTCC ATCAATTGAT AAMTGGGTAA AGTCTGGCAA ACTCAGRA  
TGGRATATTA TTTGGTGGTA AAAAGGAGTA AAGAACTST ATGTACTACA ACATGGGTG

SEQ ID NO:1715: (Length of Sequence = 371 Nucleotides)

TTTTTTTAC CGGGCGTTC CTGAGTTTAT TTGGGGCACA CCGGACGAG GGCCCTGCAC CTAGAAGAAG GTGTGGGCC  
CTGTGGTGGT GAACCGTGGC TTGTGCTGAC GGTGAGGAC CCGGTGGGC ACGGGGAT TATCTTGA STCTGAA  
TGCTTGACAG CCGGCGGCG GCACTTGCTG GCGCGATCT CTTCCACCT CATGATCTGA ATGGAGTGGG CTGGGGCGG

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GTGCCGGGCA CCCATGTCTC GGTAGCACTG GGTGACAGCG CCTGCGGTGG TCAAGTCCCG GTATTCCCGG TACATGTTGT  
GGGTGCCGCT CCGGGAGTCA TAGCGCAGCA AGATCCCGAA GTTCTTCAAC C

SEQ ID NO:1716: (Length of Sequence = 265 Nucleotides)

GTGCAGAATC TGCTCCTGGA CACCCACAGG GGGCTGCTGT ATGCGGCCTC ANANTCGGGC GTAGTCCAGG NGCCCATGGC  
CAACTGCAGC CTGTACAGGA GCTGTGGGGA CTGCCTCTC GCCCGGAACC CCTACTGTGC TTKGAGCGGC TCCAGCTGCA  
AGCACGTCAG CCTCTACCAG CCTCAGCTTG CCACCAGGGC GTGGATCCAG GACATTGAGG GAGCCAGCGN CAAGGACCTT  
TNCAGCGCGT CTTGCGTTGT TTCCC

SEQ ID NO:1717: (Length of Sequence = 350 Nucleotides)

CAGCCCCCGC AGCCCTCTGG CCCCTCCAT CTCTGTCCG TTCCCACCCA CCCCCTCCT CGGCCGAGC CTTTTCCCGG  
TGGGTGTCTAG GNTCACTCCC ACTAGGGACT CTGCCTAAT TACCTGAGCG ACCAGGACTA CATTTCCAA GAGGCTCTGC  
TCCAGGAGTC CAGGAAAGAC GAGGCACCTT GGCCGCGGG CCTGTGGGA CTTGTAGTTG CCTAGACAGG GCACCACCT  
GCACTTCCCG ACCCGCGCTG GAGGCGCGT GAGGTTTGGT GTCTCGAAGC AGCAATTAAA AAGCAAGAGG ACTTCATGAC  
CACCATGGAC GSCAATTAGG AGAAGATCAA

SEQ ID NO:1718: (Length of Sequence = 379 Nucleotides)

GACATGGAGA CTCACATGCG TGCAAGACAC TGTCAGGTGA CCTGCAAATG TAACAAGAAG TTGGAGAAGA GGCTGTTAAA  
GAAGCATGAG GAGACTGAGT GCCCTTTGCG GCTGTCTGTC TGCCAGCACT GTGATTAGA ACTTTCCATT CTCAACTGA  
AGGAACATGA AGATTATTGT GGTGCCCGGA CGGAACATG TGGCAACTGT GGTCCGAATG TCCTTGTAAG AGATCTGAAG  
ACTCACCTG AAGTTTGTG GAGAGAGGGG GAGGAAAAGA GAAATGAGGT TGCCATACCT CCTAATGCAT ATGGATGAAT  
CTTNGGGTCA GGATGGAATC TGGATTGCAT CCCAACTCCT CAGACAAATT GAGGGCTCT

SEQ ID NO:1719: (Length of Sequence = 197 Nucleotides)

CCTATATTG TTTAATTTAT TTAAGACCAC CTCCTTACAA CTTCAGAGA GAAATACAA AACAAGAAAC AGACTTGGTT  
TCAATGCAT AACCAGGTGC TGGAGTTTAA AGCACTACTG ATAACATTGT TACAGAAGAA TGGCAGCTTA CTCAGGGCA  
CTTCAGTATT CCTGAGGAAT AAACATGATT TCGGAG

SEQ ID NO:1720: (Length of Sequence = 203 Nucleotides)

GAGGGCGGG CAGAGGGAGC ATGACGGGA GAGTGAGGAG GAAAGAGGAA AGGAAGGCCA GGGTGGGAGG AAGGATCANC  
TAAATCTGAG GGAAGAAGAA GGAAAGGAGA GGGCCTATTT CATAGCAGAT GCAAATRAAG GGNCTTGGGG CTAKTCAGGA  
AGAAAGGGAA AGGGAAGGAA GGCAAGAGAG AGGGGTGAAG GGA

SEQ ID NO:1721: (Length of Sequence = 326 Nucleotides)

GGTGACGCGA TGTTTAATGG CAATTGCTAT AAACCAAGCC CATGCACAAG TAGAAAGTGC CCGTGGAGCC GGCAGGAGCC  
CCCCCGCGG NTAGAGAACC ACAAGCCCG CCGTGACGCC CTCCCGCGG CGCCTTAAAT AGATTCTTCA CTATACTCTG  
TATGTTACAG TATGTACAAG ACCCTCCCC TCGGGGACG GGGGGGACTN CGCAACNGT TCCTATGTAC ACCACCTCCC  
CTTTCGCCCC TGAGGTCAGT GGCCAGAGTC GGTGATGGG GTAAGANAGG GCCAGAGAGG GAGGAAACAG ACCCAAACAT  
GCGGAG

SEQ ID NO:1722: (Length of Sequence = 291 Nucleotides)

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TGTTTTTAAA AATGAGAAAA TTTGGAGAGA GAATACTATT ATGTCAACGG TACAAGACTC TGAATCTTGA AGATGTAGAT  
GGATAATAATA TTTAGACTTT ATATACACCC ATAGATATGT ATTTATATAT GCATACGTTT TGTATAAATT TACAATTGAC  
TTTTTGTATT CTCTTTNCTG TCATTACAAG AATGAGATGG AAACCAAAAT AGTTGTTNCCA TCCTCTTACC CAAAGAGGGA  
TACTGAAAAG TCOGGTATGT GCATGCACCT GTTCTCTGG GTTCAAATCT G

SEQ ID NO:1723: (Length of Sequence = 369 Nucleotides)

GATTGCCCGC TCCCTOGATT CCTTCCGTGT GTCTCCAGAA GCTGCTGTGG GCTTGCTAAA AGGGACAGCA CTTGTCCTAG  
CCCGATTACC TTTGGATAAG ATTACOGAAT GTCTTAGTGA ACTATGTTCT GTTCAGGTTA TGGCATTGAA AAAGCTGTTG  
TCTCAAGAGC CCAGCAATGG CATATCCTCA GATCCACAG TGTCTTTAGA TCGCCTTGCA GTGATATTTA GGCATACCAA  
TCCCATTTGT GAAAAATGGAC AGACTCATCC GTGTCAGAAA GTCATACAGG AAATAATGCC AGTTTTTATC CGAGGACTCT  
AAAAAAGCA CCGAGCTGNA TAATCGGATT GTAGAGCGTT GTTTGCAGG

SEQ ID NO:1724: (Length of Sequence = 231 Nucleotides)

ATGTATTGTT AGTTGATTTC CTTCAAATTT TATACATATT TACTTTCTGT TAAAGAGAAA AGGATAAAAT GGTATAAAAA  
AAGATAAAGC TATTAATTAA GCACGAGAGA GAAGATAAAT GGATATTTTC CTTGTGTGAG GCTAAGACAG AWGCAAATCT  
CGTTANGAAA AATGCCACCC ACACAACAGG AANTTTATCC AAAACAAAAC AAAAGCAGTT ATAGANCCCC T

SEQ ID NO:1725: (Length of Sequence = 317 Nucleotides)

GTGCAGGGTA GGGTACATAT GGCTCTGTCA GAAGAATACC ATGATTTAAG GGAAGAAAGT ACACAAGGTA CATGGAGGGT  
ACACAGGGAA AGTACATTA TAAACATGGA CGTGTGCAAA TAGGAAAGAC ATGACTCAGC ATGCTAGACA AATTGCACAT  
GCCTACCCAA ACACGCTTA GGGCAGACCC ATGACCATGA GAGGGGCACA CGTAGCTGTG AATGCAGGGC ACCCGAGAGC  
ACATGTKACT KAACATGAAG AAAGCATACG GGAAAAGCGT GTKTACACAT GNGCATGTTT AGTGGGGCAC ACGCAGG

SEQ ID NO:1726: (Length of Sequence = 282 Nucleotides)

CTCTGAACC AGATGAGCAG CCACCGGAAA CAGAAGCAGA GAGAGCCGGA GTCTGGGAA TCAGGAAGT CGCAGAGCAG  
GGGGTCCAGC ACCCTCAGGA GCAGCAGCAG TCGCCGAKT TGCCGCTTCA TGGTCTCTTG GCTCTCTTCA AAGTTCCTTT  
GCACGAGCTC CATGAAGCCA CAGAAACACC AGAAAGCATC CACCTCGTTC TGAATGACGT AGAGGATCGG GGAGAGAAGA  
TCACTCATGC CCTGGACGTA GCGAGGTG AAGTGATACA TT

SEQ ID NO:1727: (Length of Sequence = 285 Nucleotides)

GAGTATTGAT TTCAGGCAGG ACCCAGGTCC CAAAATGTTA GAAACAGTTA TCCTTTTTCC CTCGTAGTTC GTTATTCTCT  
GGGGCCCCAG TATCGTGGC TTAACAACCC GGCTGGATAG AAGGCACCTC TTCCCCAGG TTCCAACAAG ATCCAGAGC  
TGCTTCTCAT TGGCTGTCC CTGAGTCAGT CACACTGGAC CGGAAGGTGA AAGGCCCTCA TTGGCCAGNC CCGAGTCATG  
TGCCCAACCC TGGGGATCCA GCTGTGGGNC TNCCTTAACA GCATT

SEQ ID NO:1728: (Length of Sequence = 394 Nucleotides)

TTTTTTTGAT GAGGAGATAT AGCAAAGGGT CATTTGCCCC TCCTTCAGAA AACTTTTCTC CAAATCTCCT TTAACATAC  
TGCTTATCT TTCCCTCCAT AACTCCACCA GTCTCTCCAC ATCCCCCTCC AAATCTCTGT ATACATAGGC AAGAGAGGGC  
GATTCCAGC ACAAGTCTAG TCCTGGGCGA AACTTCCATC TCTTTCTCTG CATACCTCCT GTCTGGGTAT GGGGATAAGG  
GAGAGTATGG GATTTTGTTC TCATTACAT GCTTTTTCAA AATTTCTGTA ATATGTGSCA CTATATATAT CAGACAGAA  
AAAATGATAT CGGGTAAAAC ATGCAACTGA GAGCAATTG GGGAAAAATC CTCAGNCAC AAAATGTATT ACTG



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SEQ ID NO:1729: (Length of Sequence = 301 Nucleotides)

GGAAAGTTAAA GTATTTATG ATGTGTTTAA ACTGTGTACA TTCTCCACAG ATCATATTAA GGNGTTTKTA GKGGAAGTTT  
AATCTGTGCA TAGTGGGTAG YGACATGAWT AGGGTCAAAG GGGAGGYAAA AGGAAAAAAA CAAAACAAAA ACAGTCACAG  
GAAAWTAAAA ATACACOMCA GGTTACCAGA ACCTTCAGGT TTAAAATAAA ANGNAAGNAA AAGCAGAAGC AGTGAGCATC  
GGCATCAACC TGTACAAGCA TTACAAAAGG CTCCTGTGAC GGAAACACAA TTGTTCAAAG G

SEQ ID NO:1730: (Length of Sequence = 312 Nucleotides)

GACGRACGCT CTTGCCACGC CTTGAGCGTG TACACATGAT GTNTCTATG CATTCACCCCT GCCCCCAGC CGGCCCTGCA  
GAGGACAAGA TGGGTGGCCC CGGCTCCCTT TCCCCTAACC GCCCCTGCC GCTGTGCAGC CGTGTGCGTT GCGTGTGTT  
TCTGTGTAC TGGCGTGTCA CGTGATGTAG CCGTGTGTC TGACATGAGC CCCTGCCCCC TTCTCTGTTT CTCCGTGTGT  
TTCTAGAGCT CTCCTCCCTC CCTCTCAGA GGGGACAGGA CTCCTGGGGT CTGGCTCGGG CCCAGAGCCA GG

SEQ ID NO:1731: (Length of Sequence = 392 Nucleotides)

ATCGGCTATG GGTTCGGTG CGTGACAGAG GAGTGCCCGC TGGCAGTCAT CGCTGTGGTG GTTCAGTCCA TGTGGGCTG  
CGTCATGAC TCCTTCATGA TTGGCACCAT CATGGCCAAG ATKGGCGGGC CCAAGAAGCG GGCGCAGACG TTGCTGTCA  
GCCACCACGC GGTATTTTCG GTGCGGACG GCAAGCTCTG CCTCATGTGG CGGTGGGCA ACCTGGCAGG GAGCCACATT  
GTGGAGGCCC ACGTGGGGC CCAGCTCATC AAGCCCTACA TGACCCAGGA GGGCGAGTAC CTKNCCCTGG ACCAGCGGGA  
CCTCAACGTG GGTATGACA TCGGCCTGA CCGCATCTC CTGGTGTGC CCATCATCAT TTTCACAG AT

SEQ ID NO:1732: (Length of Sequence = 352 Nucleotides)

GTACCTAGTA CCTTAGATAA AGGGAAATGT GTGATTCTTA ATGAGCTTTA AAAGGAAACA ACTTCTTTTT TTTTTTTTTT  
TTTTTGAGAC GGAGTCTCAT TTTGTCCCC CAGGCTGGAG TGCAGTGGCG CGATCTCTGC TCACTGCAAG CTCGGCCTCC  
CGGGTTCAG CCATTCTCCT GCTCAGCCT CCGAGTAGC TGGGACTACA GGCTCCACC ACCACGNTCG GCTAATTTTT  
TGATTTTWA GTAGAGACGG GGTTCACCG TGGTTAGCCA GGATGGTGTG GATCTCTGA CCTCGGTGAT CCACCCACCT  
CGNCTCCAA AAGTGCTGGG GATTACAGGC GT

SEQ ID NO:1733: (Length of Sequence = 321 Nucleotides)

TTTTTTGTTT GTTTGTTTGT TTGTTGTCAG AGTCTTGCTC TTGATCTATC TCCAGGCTG AAGTACAGTA GTTGATCTC  
GGCTGTCTG ACCCTCTACC TCCAGGTTT AAGCAATTCT CATACTCAG CTCCTGAGT AGCTAGAACC ATAGGCACAC  
GCCACCATC CTGCTAACTT TCTATTTTT AGCAGAGACT GGATTTTGCC ATGTTGGCCA GGCTGGTCTC GAACTCCTGG  
CCGCAACTGG ATCTGCCAA CTCAGCCTC CAAAGTGCTG GGATTACAGG CATAAGCCAT TCATGTGCGG TTKTTCAACT  
G

SEQ ID NO:1734: (Length of Sequence = 208 Nucleotides)

AAGTCAACGT ATCTATTTTT ATTATGAAAC ATTAAATTTT GACACATTGC CTCATTTGCT TTTTAAAT CTATTATCTG  
ACTTAAACCT ATTACAGAAA AATGCCAATA AATTATATTA ATCATACTTT GGGTCTTTTT AAAACTAGGA ACATAATATG  
TTTTATGATA AACAATAATA CTAAATCTGA GTGTATGAA CTGTTAAC

SEQ ID NO:1735: (Length of Sequence = 347 Nucleotides)

TCTATTACCT GTACAGTATG GTTTATAGT TGGTGAATTT CTAAGGGGGA AGCCGCCAG GGAGGAGCC CTAGAACGGAC  
CGGACGCCTG TNCACCCCCA GCGCTGCCCC TTGGCCGAGG AGGCCTCAGC CCTGGGGAGG GAGGGGGCAC TGGTGCCCCC  
AGCCTCTCCA ACCCCCAAAC TGCTGCTGCG GGAACCCCC CCCACCCCGC CTCAGAGCC CTCCTCTTG GACTAGAGCG

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GCTGGGCAGA GCTCTAAACA GGGGCAGGGG CTCCTCTGCC AGCCTGTGGG CATGGCAGTC ATTCTTGAA GGGGCAGGAC  
CTCCGGCCTT GTCCATTTCG GGGGGAA

SEQ ID NO:1736: (Length of Sequence = 356 Nucleotides)

GACACAGGGA GGGGAACAAC ACACACTGGG GCTGTGTGGG GAATGGGGGG TGAGGGGAGG GAGAGCATCA GGACAAATAG  
CTAATGCATG TGGGGCTTAA AACCTAGATG ATGGGCTGGG CGTGGTGGTT CACGCCTATA ATCCAGCAC TTTGGGAGG  
TGAGGCGGGC GGWTCACGAG GTCAGGAGAT CAAGACCATC CTGGCCAACA TGGTGAAACC CGCCTCTAC TAAAAATACA  
AAAATTAGCC AGGCATGGTG GTGGTGGT GTAAATCCAG CTACTCAAGA GCTNAGGCA GGAGAATCAC GTGAACCTGG  
GAATCGGAGG TTGCAGTGAG CCAAGATCAT GCCACT

SEQ ID NO:1737: (Length of Sequence = 324 Nucleotides)

TGTTTTCTAA TGATTTTAA TTTTCAGAG GAAAATAATT TCAAGAAATA AAACCTAATT CCCTGAGTC CTTATTGAAT  
TAAATATTGA AAAACAATGA ATGAATGATG CATTCTTATT AATGGACTGT AAGAACTGA TATAATGGAC TTCATTCTAC  
AATTCGGTTT CTTATTGTCT TACACATGCT CCTCGAAGTT AAACATTTTA GGACCTTAAC ACCATTTCC TAGTACAATT  
ACTAAAAGAA AGCTTTGGAT AATATAATAT CAGGGAAGAT AGTACAACAT AGTGAAGGAT GACATAGGAG AGATGTGAGG  
AGCA

SEQ ID NO:1738: (Length of Sequence = 316 Nucleotides)

GGCACCCTGG GCATGTCCAG CCTGGAGCAG CTGGAGCAGA ACTTGGCAGC AACAGAGGAA GGGCCCCCTGG AGCCGGCTGT  
CGTGGATGCC TTTAATCAAG CCTGGCATTG GGTGTCTCAC GAATGTCCA ACTACTCCG CTAGGCCCAT CATGGCTCAG  
GCTGCCAAG GCTTTTNGT CACCTCTTTT GTTCTCTCAC ACTGACCAGT CTGGCCCTTA AGCTGACTTA GAAGGGTTT  
TCTGAATTGT CTAGATCCAT GCATTTTCT TCTAGCTTC TGCCCTGCTC CCTATTCACT TTACACTGTG AAAGGT

SEQ ID NO:1739: (Length of Sequence = 398 Nucleotides)

CAAAAACCAT CTCAGGATAC TGAGAAGCCT CTGGAACCTG TGAGTACTGT TCAGGTAGAG CCTGCAGTTA AGACTGTAAA  
CCAACAGACT ATGGCAGCAC CAGTAGTCAA AGAAGAAAA CAACCTGAGA AAGTCATCAG CAAAGACCTT GTTATAGAGA  
GGCCTGACC AGATTCAAGA CCAGCAGTTA AAAAGAATC AACTTTGCTT CCCAGGACCT ATTGGAAGA AGCTAGAGAG  
AGAGATTGGT TTCCAGATCA AGGATACAGA GGTGAGGCC GAGGTGAATA TTAATCCAGA GGTGGAAGC TATAGAGGTT  
CTTTATGGGA GGGCGTGGC AGGCGTTGG TAGGGGACA CACTTGGAGA TTATCTCAG TATAGGGGC AATAAGCC

SEQ ID NO:1740: (Length of Sequence = 376 Nucleotides)

GAATAAATTC GCAAACTATG CATCTGACAG AGGACTAATA CCCAGAATCT ATAAGGAAT CAAAAATCA GGAAGAAAA  
AAATCCCATC AAAAGTGGGC TAAGGACATG ANTAGACAAT TTTCAAGA AGATATGCAA ATGGCCAGAA AGCATATGAA  
AAAATACCTA ACATCCCTAA TTATGGGGA AATGCAAATC GAAACCACAA TGCAATACCA CTTTACTCCT GCAAGAATGG  
CCATAATTTA AAATCAAAA AATAATAGAT GTTGGGTGG GATGTGTGA AAAGGGAACC ACTTTTACAC TGCTAGTGGG  
GATGNTAAAC TACTTGGCT ACTATAGNAA ANCAGGATGG GNGGATTCCT TAAAAG

SEQ ID NO:1741: (Length of Sequence = 322 Nucleotides)

CAATGCAA AATCAAGACT TGTCTAAAN TGTCTCTCA TACTTATA TGTCTAAAT ACTNTAA AN TATAGTAAAT  
CTTGATGTTT AATACAGCAA ATGTTAAACC AAGCTTTTAC TACAGAAATA AACAGAAAT TATAGGCGCT CATTATCCTT  
TLAGACAAAG TTGTATTTC TTTGCTATT TTTTGTGTTA GNTTTKTC AACTATTTCA CAAACAGGNA CAWRATATT

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TAAATTGTTA ATAGAARTTT CCAGTTTTCT TTAGTCTCTG GCTACTCCAA GTACTGGTTG CTGTGAATGA CCTTTTCATG  
AG

SEQ ID NO:1742: (Length of Sequence = 322 Nucleotides)

CCCCCAGCC AGGAAAAAAA AAAAAGCTT TGAGGAATGA GAGAGGGTGA GATGGGTGGA AGAAGGTGCT GGGCAGCCAC  
GGGGCCACG CCTCANTGGC CCCAATTGCC GAAGCCGATC TCCTGCTTGT ATCTGTTAGT GAGGATGTTG GCTTTGCGCG  
TNAGTTTGA GAGCACAGTG TGCAGCCCGC GCAGGTGGTA GTGGAACTNC TGTTCAGGT CTCTTCCGCC GCGTCCGAA  
CCCTCCAAGT GGGCCAGGTC CACCAGGATG TCCTTGGGAC TTCCAGGCAC TGCCCTNCTC GNTCCCAAGC CGGTNGGAGG  
CG

SEQ ID NO:1743: (Length of Sequence = 250 Nucleotides)

ATGGGTAGGG GGCCAACGCA GTCACCGCG TCCGCACTCA CAGTCCAGCC ACTGACCGCA GCAGCGCCCT TGGTAGAGC  
CGCTTCAGC GAGAACACTG AATTGCCAAC GAGCAGGAGA GTCTCAAGGC GCAAGAGGAG GCCAGGGCTC GACCCACAGA  
GCACCCINAG CCATCGCGAG TTTCGGGGCG CCAAAGCCAG GAGAAGCCGG CCATCCCGCA GGNCCGNGTC TTTCAGCGAG  
ACGNGAGTTT

SEQ ID NO:1744: (Length of Sequence = 247 Nucleotides)

GATGATTGAG TGTTCCTTTA AAAATAAAAA CCCACAAAA AAGCCAGAAC ACCCTACCCA ACCCAGCCCA GTGTAACAGG  
TTAGCCATTA ACACAGNATA AAGAWGGTCC CAGCCACACA CGTCATTACT CGGCAGAGGG TGTCCAGKCT GGTGKCCGA  
CGTCACAGTG GATGGCCCTG CGTGGCTGGG RCACAGACAG GNGCAGGCA TGGCACCTTT CGNCACGCAG AGCAAGCATA  
GGCTGTA

SEQ ID NO:1745: (Length of Sequence = 379 Nucleotides)

TTCTAAACCA GTTAATAAAT TCATTCCACA AGTATTTACT GATTACCTGC TTGTGCCAGG GACTATTCTC AGGCTGAAGA  
AGGTGGGAGG GGAGGGCGGA ACCTGAGGAG CCACCTGAGC CAGCTTTATA TTTCAACCAT GGCTGGCCCA TCTGAGAGCA  
TCTCCCCACT CTCGCCAACC TATCGGGGCA TAGCCGAGG ATGCCCCAG GGGGCCAGG TTAGATGCGT CCTTTGGCT  
TGTCAGTGAT GACATACACC TTAGCTGCTT AGCTGGTGCT NNGCCTGAGG GCAGGGCAGG AAAATCAGAA TAGCATTTCG  
TTTCTCTGGG GCAAAAATGG GAAAGTTCAG CGGNGNCAG CAGGAATCAA GTGGGCATT

SEQ ID NO:1746: (Length of Sequence = 472 Nucleotides)

TTCTATGCTGT CCCTTCATTG AATTTTAGAA TGATTGAAGA TAGTGGGAAA AGAGGAAATA CCATGGCAGA AAGAAGACAG  
CTGTTTCAG AGATGAGGGC TCAAGATCTG GNTGCGATCC GACTCTCCAC CTACAGAACA GCATGCAAGC TTAGGTTTGT  
TCAGAAGAAA TGCAATTTGC ACCTGGTGGA CATATGGAAT GTCATAGAAG CATTGCGGGA AAATGCTCTG AACAACTGG  
ACCCAAACAC TGAATCAAC GTGTCCCGCT TAGAGGCTGT GCTCTCCACT ATTTTTTACC CAGCTCAACA AACGGGNGN  
CAACCACTTC ACCAAAATCC ATGTGGAGCA GTCCATCAGN CTNCTNCTTA ACTNCTGCT TGCAGCGTTT TGATNCCGA  
AGGCCATGGT AAAATTTTCA GTATTTGCTT GTCAAAAANG GGTTTTAGGC NCCATTGTG TGGGAGGGGA AG

SEQ ID NO:1747: (Length of Sequence = 351 Nucleotides)

AGGATCAGAA TACTTTAATA AGATACCACT GTCAAAATAC ATTTCCCTAT AAAGTTAAGC TCCATACAG TTATAATGTT  
GTCAGTAGGA ATTCGACAAT ATAATAACGT TCATGAATC GTTACGTTGA CAGGTAGGGT TAATAGGAG GTTGAATAT  
TTTCCAGTGT TTTAGTAAAA CTGCAAGGGT AAAATGCCCT TAATGCCAGG GCAACACACA CAGGNAATCA AATACCAGCA

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TTTACACGNC AGTAACCCCTT CAAGTTCTGC CACCCTGTGT GGGGGTAATG CCGTGCAGCT AAAAATATGG GTTTTACGNA  
ACANCCATGG CCTAAGGGGA TTTCTCATAG G

SEQ ID NO:1748: (Length of Sequence = 428 Nucleotides)

AATAGCTTCA GCTGATGGG TGAGTCTAT TCATGTTATA AAAGGTACTC TGCTTTCCTT AACATTCCAT AAATCTAAT  
CACATCTGCA AATACCTTCA CAGCAACATC TAGACTAGTG TTGACCCAA CAACTGGGCA CAATAGTTTA GCCAGCTTCA  
CACATAAAC ATCATCACAC TATGCTTCTC TTCTGTGTC TTGTTACCA CGTATCTGTT CCAATGTGTT TNCCTTGTAT  
ATATCCTATC CTGTATATC TCTCCTATGG TTTGTGGAA ACTATAAGCC TTCTGGGGG TAAACACTA TATCTTTGTT  
CAATGTATA TACATCGNAT AGTATATCAT GCTGGGGG ATTGGTTAAA CCCCCATTT AAATACAGCT NGGCAGCAGG  
ATTTTAGGCA TTCCGTATG GTGTGCA

SEQ ID NO:1749: (Length of Sequence = 478 Nucleotides)

GGTTACCA TGTTGGCCAG GTTGGTCTCA AACTCCTGAC CTCAGGTGAT CCACCTCAGC CTCCTAAAGT GCTGGGATTA  
AAGGCGTGA CACNCACT CACACCTGGC CCTCAACCAT CTCTTTCACC TTCTGCTCAT GACAGTTTAC TAGAATTTTT  
TTCCCTTGA ACTGAATGTT AAGTCAAAA CAATAAAAA TTGCTAATCA TTACTATGAC TCCAGAGCTA CTGCTTCTT  
TAAATATCC TGAANTATA AAATATAAG CCAAAGCAAT GAATTTCTAA TGGTGGAAIT GTAGACACTG TGGGCCCCCT  
GGGATGTTA TTTTCAGATG GGGCAAGGG ATATTCTAA CCTATTTTA AAATCATGCC AGCCTAGATA ACTATGTGA  
AAATATGG GGTGCTTAGC AAAACTATTA CTTAGCACC CTTGGCAGT TTACATTA AAATCCCTTT ATTAGGTT

SEQ ID NO:1750: (Length of Sequence = 439 Nucleotides)

GACATTTTAT TTCCAGGTG GCACGTGAT AAGGCACAGG GCACAAATGGC TTGGGGTCC TGGAACTGGA AATGGAGACA  
GGTGTCTC AGGTGTCCT GCCTCCACCA CCCCCTAAGT GCACTTGAGA CAGGACCACT GGTGGTGGTT CCAGCCCAGG  
GTCTGAAGG GTNCCACTGG CTCTAGGGGA GAGCATGGG GACAGCTCCC CAGGOGGAC CTCTACTCT CCAGCTACCC  
AGGAGGGACC CINTCCTCT AGGGGGGAG GCCAGCTCCA AAGTGCTTNG TGGCTCCCA GGTAAAGG ACCAGNCTGC  
CAGGAGGGC TNGNTCANA GAGAGAATAG TAAGATNAGA CGAGGAGAAG CACCCACTA GCACGGGAT TGGANAACAC  
TNTGGCGGT ACTCGTCATG TGGTAATTT GCCAATTC

SEQ ID NO:1751: (Length of Sequence = 347 Nucleotides)

CTCTATTACT TATGATTACA CCATGGCAAT ATTCTTTTT CACCAGGAGC TTGGACCTG CGCAGGTTGT GGCATGTAAT  
CACCCGGAGC ATGTAGTCAT CTGTAGAAAT CACAGGCACA CTCATGTTG CTCTGGAAGG AATCTGTTTT CCACAATGAC  
TCCCCCAGC TAAATGACAC ACTGGCATTT TGCATGCCTT CCTCACACAT GGGGCACCAG CCTTGCTTCA GAACACCCA  
AACTCCACAG AGGCCCTTAA ATATGGGCTA GGGACAGATT TTCTTTAAGA AAGAGTTAAG GAGCAGCTT ACAAAGGGAC  
AAGGCAATT CCACAAGTCA GGCAGCA

SEQ ID NO:1752: (Length of Sequence = 297 Nucleotides)

GGATATTCTA GCCATACAGA TTCAATGGAA CAGAGAAGAG AAAGGAGGTT CCATTGGCAC CATAGTGAGC CATTCAATTTG  
CCCAGGGAAG NNGGTGGGG CTAGGGGCT AGGTTTGGTC CCATGGCTAC ATTAAATGCT TGGCATGACT CCAGGGCTNC  
TCTAGTTAGT GGCTCCAGCA CAGTATGAGT TAGGTGAGTT AGGTGTAGGA GTTTGGGGAC AAGGAAAAAG GGAGGAGGG  
TCCCTAGAGG CTNGGTGCC ATTACATAGA CTCAATTOG TCAATGCGCT GCTTTAG

SEQ ID NO:1753: (Length of Sequence = 402 Nucleotides)

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AAATTTAACT TCAACAAGCT GGTGATGCCC AACTACCCAT TCATCAACAT TCGGTCAAGT GGTGTGGTTC CTCAGAGTGC  
 ACCACCAGTG CCAACAGCCT CTTCOCGGTT CCATTTCCCA CCTCTGGACA CCCATTCTCC AACCAATGAT GTGCAGCCGG  
 GACGGTTCTC TGCTAGCTCC CTAAGTCTT CTGGCCAGGA GTCCAGTAAT GGTACTGATA GAAAGACTGA GCTTTCAGAG  
 CTGGAGGATG GCTCAGCTGC TGAAGTGGCG CGGGGTGTGG ATCCCGTGTG CTCCAGGAAT GCCATTGGTG GAGGAGGGAT  
 TGGCCATCAG AAACGCAAGC CTGACATAAT GCTTCCTCTG TTTGCTAGGC CAGGGATGTA CCTGACCCC ACAGTCCTTC  
 GT

SEQ ID NO:1754: (Length of Sequence = 397 Nucleotides)

CAGTGGCATC TATGGCTCTA AAATGGAAAG GAGGAGTCTT GGATTCAGGC TACTGACTTA CTCTGTGAAT TTACACATAA  
 CTTCCTTTGA GCCACAGATT TAGCATTCTA CCAGTCACCT GATATTTCTG AGCAGCCACA ATATTTTAAA ACTATATTTA  
 AATCTGAATT TGGATTTAGC AGAATTTTAT TTTTCCATT TCTATTTTCT ATGGTCACTA AATTGAAATT ACAACCATG  
 TAAAATTGA TATCATTAAA TATGTAGGAC TTTATCCAGT TTCAAAGTAA AGATGTCTCT AATGTAATTA ATTGTNATTT  
 TCACTGATGA GACTGAAATA CAATCAGTCT GTATGTGTGT GTGCGTATGT ATCAGTGGTA AGAGGCTATG ATTAGAC

SEQ ID NO:1755: (Length of Sequence = 353 Nucleotides)

GAATTACTCT GTTGTTCACC TTTTGCTTTT TGCAGTGTIT GINCTCTTAT CTGTATTTTG AGCTTAGTGC TAGGACTGAG  
 AGGCTGCACC ATAGGGAATG TATGGGAGAT GGTGAGGGGT GCCAGTNAGG GGTGCGTGA GGAGAGGCCT GGGCTCCTCT  
 ACTGGATCTA CACTCTGTCC CAGGTTTTTA GATCCCACTG AGCCAGCTG ACTGAAAACA AGGACAGTCA GGGTGAAACT  
 TCTTTTGCCA GAAGTGTGGC CTGAGTTGAA TTTCTGGGAG GATGACGCAG ATGTCTGCTG CAGAGCTGGG CTGAGAGTTC  
 TNCATCTAG CTCTGACTTA GGTCAAGGGG CCT

SEQ ID NO:1756: (Length of Sequence = 184 Nucleotides)

TGGGCTCGGA GCATCGAGCT GGACATGCGC ACCATTGCCA CTGCACTGGA ATATGTCTAC AAAGGGCAGC TGCAGTCTGC  
 CCTTCCTAG CCCTGTCTCC CTCCCCAAC CCTATCCCTC CTACCTCACC CGCAGGGGNA AGGAGGGAGG CTGACAAGCT  
 TTGAATAAAA CACAAGCCTC CGTT

SEQ ID NO:1757: (Length of Sequence = 425 Nucleotides)

ATTACAGGCG TGANACCAC ACCTGAGCTA ACTTCCTGGC TTTTCAATCA AACCATCTTT GTCACTTCCT GTCCCCACCT  
 GAAGTCAGAA AGCCTGAAGA GAAGACGGCT CTAITGCCNC AGCTGGAGTG TGGTGGCACA ATNTCAGCTC ACTGCAACCT  
 CTGCCTCCTG GGTTCAGGCG ATTCTCCTGT CTCAGTCTCC TGAGTAGCTG GGATTACAGG TATGCACCAC CACGCCCTGC  
 TACTTTTTCG TATTTTTAGT AGTAGAGATG GGGTTTCACC ATGTTGGCCA CGCTGGTCTC TATCTCCTGA CCTCGTGATC  
 CACCTGCCCTC AGCCTCCCAA AGCGCTAGGA TTACAGGCGT GTAAGCCACC ATGCCCGCC AATTTTGCCA GTTTTTATTG  
 GGCTATTCTT TATTGAGATC TAGGG

SEQ ID NO:1758: (Length of Sequence = 407 Nucleotides)

AGGAAGGCAT AAGCTAAGCA TCCTTCTAAC CAGTTCCCAA AGTCCCATCT GCCTCCATGT ACCAGCTGAT CGCAGAGCTG  
 GACTGGGGCA GGCTGGGCTT CCAGGAAATT CCTGAAGTTC TGAAACAGCT TCCCCTCTAG AGAAGCCAC CCAATGTGTT  
 TTTTAGTGAC AGGAAGAAAG GAGGGAAGAG CTGATGTGGT GTGGCCTGCC CATATCATAC AACCCACCA GGAGCAGGGC  
 AGTTCCCAAG GTGGGTGCCC GTAGATCTGG GAGGCCAGGC TGGCATGATT CCTGTGAAGA ACTGTGCTG TATCGTCAGG  
 GAGAGGCTG AGCCCTCTCA GAAGCAGGGA CAGCCACAAC TGAAGAGCAC GCCAAGCTGA GGCAGCAGCA GCACTGCTG  
 GAGCAGT

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GGAGGCCAAG GCTGCAGTGG GCTGTGATTG TNCCACTGCA CTCAGGCCCA AGTGACAGAG CAAGACTCTA TCTCAAAAAT  
 CAAACAACAA CAACAACAAA ACACCACATA CACACACACA ATGAGGGTAA ACAAATAAG TATGTGTGGG TCACACTTCA  
 GCAGGGGTG CTGGTTTGGC AGAGGAAAGT GCAATTATTT TATCTATGGG TGTATTATGT CTCCTACTTA AACTGTCAGT  
 TACAGATGGC AAGACTGTTT

SEQ ID NO:1766: (Length of Sequence = 373 Nucleotides)

GTAAATACT AAGACACTAA ATGCGTATTT TAAATTTGCC CATTAAGTTT TGGGCTGCGT AAGAAATTAG TAAAAAATAT  
 TTCCAAATAA CATGCAGAAG TTGTTTTTAA ACTTAAATC TCATATTTTA GCTACACCCA CAGCGATGCT ATAGAGAGGA  
 GCTGGATTTC GTTGTATCTG AATGGCTCAG ATTATGTTCC TTCCAAAAA GTTATTTTAT GTACGATCAT TTTTATATG  
 ANGCAATGA AAAATCACC AGAATCTACC ACGTATTTAC CACATAGACA AATGTCCATC TTTAGATCTG TCATTCAACA  
 CCAATGTTATT CTTTTATGC AACAGAATGC AGTGTGTGA GAAGTACATC AAG

SEQ ID NO:1767: (Length of Sequence = 330 Nucleotides)

GGTGACAGTG GCGGCANAGC AGCAGCATGG TGGCAGCCAC CAGTGGGCGT GGGGCCCCCG GGGGAGAGGA TGCCCCAGAG  
 GTGCATGAGC AGACCTCGTA ACGTCTCTCC GAGCGGCTCT GGTTCATGTTG TCCGTGAGGG GCGCGGGGCC CCTCTGCCGC  
 GTCCAGCCCC GCAGCCACAG ATCCATGGC CTGTGAGTCT CCACACACCA GCCAGTCCCG GCGGTGGAC TGTGGGTACC  
 CGGGTGCCAC CTCAGCTCG CCATCCAGCA CTTTCCAGTA CTCTGGCCA CGGAAGAAGT AGGAGGCACC GTNGGACCAG  
 CGCATGGCGT

SEQ ID NO:1768: (Length of Sequence = 361 Nucleotides)

AACTGGAARA CCAAGACTGG TAGACTCTCT TTTCTTCAG ACAATAGGCA GGAGCCAGGC GGAGTCCAGG GATTCTTGGA  
 ACACCTATCT TTTCTTGGGA GGACACTAAG TTCTATTGA AGACAAAGTT CAATATGGCA ACAGGACTGA TGGGACACGA  
 AGGAGTGGCT ACGTGATTT GGTGACAGTT CTTCAAACG ACAGTNTCTC AAGGAAAGGT GGACCTAGGA ACTCCTGAAC  
 TTTTGGGTG CCTTAAGTGA GAAATCAGCA TGGCTCAGGC AAGTCTCTG GCTGTGAAG GCCTAGCAGG TGTGAGTTTG  
 GTTCCCACTG CAGCCAGCAA GAAGATGATG CTGAGCCAGA T

SEQ ID NO:1769: (Length of Sequence = 389 Nucleotides)

CAACTACGC AGCGCAACT TCAGAGAGCA CATCCAGCGC CGGCACCGT TTTCTTATGA CACTTTTGTG GATTATGATG  
 TTGATGAAGA GGACATGATG AATCAGGTGT TGCAGCGCTC CATCATCGAC CAGTGGAGAG AGTCCGTGCT TGCTATCTGT  
 CTCATGTTAC AGAGCTTCCA TTACATATTA AACGTGAAAT CTATGACTCC TGTACCTTAC CTGTCAACA GACCTGAAAA  
 TGAGCCATGG CATTGGGACA GGTCACTTC TGACAGGGGA AGTGGGTCCC CAGGTCAGCC CTTCTCTTCC CTTTGGGCTC  
 TTGCCAAAGN TGTCTTCCCC TACTGTTAAN CTGTGTTGTC ACACGGTCCA GTTCGTATG GGTCTCGG

SEQ ID NO:1770: (Length of Sequence = 394 Nucleotides)

GCAGTTTAGA GGAAGCTCCT TCTGGGCAAG GTCAGGCGGT CCTCCTTCCC TCTCTCTTC CCCTTTGTCC CAGCCTCAAC  
 TGA CTCTGGC TGTGGGAGGT GTGGAGGTC CTTAGGCTTC CCTCCCCAAC CTGGCTCCA CCAACACCCC TAACAGGAGG  
 CCCGTGGAAG GCTCAGCCTC TCCTCCGAT CCTCCTCTCT TCCTGCCTAT CGGAGGGAGC CAGGCTCCCC TAGGCTGACC  
 CTGAATCCTC TTCTCCTT CATGGGAGGG GGCAGGAAT CCAGAGGAGG ATGAAGCCAG CGGGACCACA TGGCTTNGTG  
 GCTTGACAA ACAAGCTCAG GGAGGAAATG AGGAGGCGNC GGCTTCAGAG GATTGCACT CTGTGGGCA CAGA

SEQ ID NO:1771: (Length of Sequence = 373 Nucleotides)

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CAGAAAAGGC AAAGTTTATT CCAAGTGTGA CAGAGAGAGG GTGAGCCTTG CACAGCAATT CTAAAAACAT GTCATCTCCT  
 TCACCTAAGA GGTAAGANCC GGCTGTAACT CATGGGGTCA CTAAACCGGC CGCAGTTACA GTAAGCAGAA GAGGTCACGG  
 CTCAGGCTTT CTCAGACTTT CCTGGGACA CACGGCTCTC TGGGGGGGCC CGGCGAAACC ACTCGGACCA GGAGCCATCG  
 TACACGGCCA CATCAGGCTT NCGCAGAGG TAGGCAGCCA AGGNCACGTG GCAGGCGGTG ACTCCCTTGC GGCACGTGGC  
 AATGAGAGGC TTCGAGAGAT CCACCTTCCT GGGCTTGAAC AGAGCACGGA GCT

SEQ ID NO:1772: (Length of Sequence = 281 Nucleotides)

AAAGTGCTGG GACTATAGGC GTGAGCACTT GCATCCGGCC TAGGTGGGGT TTTGTCCCG TTCTGCAGGA GGGAGACTGA  
 GGCTCGGAGG TTCAGGGCCT GCTTGGCTGT ACCCAGCCCC AGTATGTGCC TTGGCCACAC TAGTCAGATC CTTCCCTCC  
 CACTCTGCC ACCCTGCTCC TGCCCTGTCC CATAATCCAG GTTGAATGGG GGTGGGGATT TTNGGGAGCA AGGAGGGCTC  
 AAAGAGATGG AGATAGGCT GTTGTGAGGC CAAAAGTGCA A

SEQ ID NO:1773: (Length of Sequence = 401 Nucleotides)

CTCTCTGCCA TGCTAACCAA CGTAGAAGAG AATAAGATAA AGCAATGAAA AGCAGAGTGG CACTCTGATA TATAAGATT  
 TCTAAGAAAT ATAGAGTGAA TTTTGCCCAA AGGCCCTCAC TGAAGTAATT CCTGAACCAA AAGAGTATTT CTTAATCCAA  
 AACTTTACAG TATTAGACCT ACGAATCTG ATGATGCTG ATCAGATGCT AGTGTCTCTC GACAATCCAT GCAGTTTCC  
 AGTATGAAGG AAAGTAACAA ATATACCATG GTTATCTTA TTTCTTTCTG AAAAATATCT AGGATATTTT ATAGTGTCT  
 GTGGTAAAT ATTCAATTGA CANTCACAAT GAAGTATAAT CAGAAGTATT AGCAATTTTA CTTGTCTTAT CTTGTATATC  
 C

SEQ ID NO:1774: (Length of Sequence = 230 Nucleotides)

TCGTGTAATA AAAAGTAAAA ATGTTACACA TAGGNAATAA ATGTAAAAAG CTATACCTTG CAAAATAAA GTTTCAGCTG  
 AAGTAAATGC TAGTTATAAA TTAAATACAA TTCTATTAG NNCTTGCAAA AGTCAAAGGA AGACGGNAAA CTCCTCTTT  
 TGGCAATTCA AAGGCAAAGA CCGTTCATT TATCTTAAT TTTCCTTAT ACAATCATTA TCCCCACAG

SEQ ID NO:1775: (Length of Sequence = 359 Nucleotides)

ATTCAGGACA TAGGCATGGG CAAGGACTTC ATGACTAAAA CACCRAAGC AATGGCAACA AAAGCCGAAA TTGACAAATG  
 GGATCTAATT CAACTAAAGA GCTTCTGCAC ATTAAAGAA ATTACCATCA GAGTGAACAG GCAAACTACA GAAATCTAC  
 CCACTGACA AAGGGCTAAT ATCCAGAATG CTACCTAATT TTAAAGACT TTTCCGGCA TCTTGAAAAA AACCACCAT  
 ATTTGACATA GGTAAACTG AAAAAACAAA CTATTCATAA TTACAATTG TGACACATTA TGTAGTAGCT AGGTTCATCA  
 CATAAATTAC ATGNTACCCC AGTTCAAGTT AAATTCAG

SEQ ID NO:1776: (Length of Sequence = 375 Nucleotides)

GGCAGAGGCT GCAGTGAGTC CAGATGGTNC CACTNCACTC CAGCCTGAGT GACAAAGTGA CACTCCATCT CAAAACCCCA  
 ACTCCCCCA AAATTTTAA TTTGGTTTGC ATTTCTTGA TTATGTTGN GTTCGATTGA GACTTGAGGC TGGCACTGGA  
 GCAGGCGTTC CCACCTGTCC CGTGAGGCAA AGGTCTGGG GAGTGACCAA GTGCATCAGG GGTGTCAGAT GGCCTATTCT  
 GGCCTTTTCA CGCTCAGCCA TCTTAGCATA NGTGAATATA CCATGAGCTG TTTCTCAGCT TGTTTTATT TCTGGNGAG  
 ATAGATGTCA CTGGAATGNN CTTTNTCAA GTGAAAGGCC ATCTTGTGCT ATGAC

SEQ ID NO:1777: (Length of Sequence = 327 Nucleotides)

GATAAGGGAG GAAAGGCAGG AGGAGATGAG GCCAGCCCCA CTGATGACAC CTGGGGCCAG GCCTCACAGC TGCAGGCATC  
 AGCCGGAAAC TCCAGGCTGC TCATGCTCAC TGGCGTGCT GAACTGTCTC TCCACTTNT TTTGGTCTT GATCTTGAT

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CCAATGTCCA CTCTCTTCTC AAAGAAGTTC ACCAGCAGCG ACTCCGTCAG GATGGAGGCC AGGTTCTGCT CAAAGGAGAT  
GCACCACTCG GTGTGACGG TGCCGCCGAT GCGCGCTGTG GGGCTGCAGG CCTNCCCGCC CACCAGCACC GTGTGCTCTG  
CAAGGTCTTC ACATTGCAGG GAGCCCGTNC TGACCACCGA GTAGGAGGAC ATGGACATGT CGTCTTT

SEQ ID NO:1778: (Length of Sequence = 297 Nucleotides)

CCCCCAACT AGAAGAATAC AATTAAAAA AGAGGCAGTA CACATGGTTA ATAAACAGAT GAAAAAATTA AAATTCACIT  
GTACTATAAG ACAGGCAGAT TAAATTATTT TTACCTATCA AATTAACCAG AACAAAGGCA TGCACTTTAG TGAGGATGAG  
GAACATACAG ATTCAGTGT GAAAGTAAAT GTACACACAA CCTTCAAGT TGATAGTTTG GCAGAAGTTG CTAAAAACAT  
TTAAAGCTTT CATACTTTTG ATAAGGCTTT TTATTTTAGA AAACATATAA ATAAAAA

SEQ ID NO:1779: (Length of Sequence = 353 Nucleotides)

CAGAAGTAAA AGATTTTAT TGTCTATAG AACTTCTGA AAAGAGATCT AATTGAGAAA ATATACAAAG CATTTAAGAG  
TTTCATCCCC AGAGACTGAC TGAAGGCGTT ACAGCCCTCC TCTCCAAGGC TCAGGGCTGA GAACGGTTAG CATATCGAWT  
GATCAGTAAA AACATGCAAA AGTGAGAAGG AAAGGGAAAA AGGTGCATT CCGTAAGCTG AGGGGGATGG AATTTTCAGAA  
CAGAGGAGGC AGGGTGGACA AGTACCAGGT GGCTCTCCTT TTCCCTCTGT GTTATCTTTC AAAACAGTTC CCAAGCTTNG  
NGGAAAGCAA TGAGCTCCAC CCTATTCAGC AGA

SEQ ID NO:1780: (Length of Sequence = 428 Nucleotides)

CGGCTTCCCC GGAGCAGCCG ACAGGGCCAC AGGAGAATGG TATGCTGCTC GGCACTGGAGT GAAGACCACC CCGTGTGCAA  
TCTGTTCACC TGTGGGTTTG ACCGGCAAGC CATTGGTTGG AACATCAACA TCCTGCATT GCTACAAGAA AAATAAGGAC  
ACCGGCAGCC CTAGTTTCA CTGTTTGCCA GCACAGACCT TTGATGGGTG CAGGCTTTTC TGCGTATTAA TCAGCCATTT  
TTGTGAGAGT TTGACCTGG AAAGGGTGCT TTGTATATGT TCTTTTCA TAAGTCCCAG CTGTCATGAA ATGTACAGAG  
AAATGIGTGG TCGTATTTTT TACTTTTGTG TTGTATATGT ATGATAATT NGGGTCCCTT GGGCAGTAGA GGCAAGCTC  
ACCTCCCATG TAGCACATGA AAATGCTT

SEQ ID NO:1781: (Length of Sequence = 459 Nucleotides)

ACCTCAGATT GTGAAGGCT CTGTAGGCTA TGTTAAGGAC ACTAGAAATC TATGAAAGG TTTTAAGCAG AGAATTGACT  
TGCTCATATT TTINCTCAA AAAGCTCAAT AGCTACAAA CCGTCAATAG ATGGTAGCTT TGTGGGGCTG GGGTGAATGC  
AATGATATTG CAAAACAAGA TATAGGGAGA CAAGAACTTT TAATAACCTA AACCAGTGGT TCTCAAACIT TCCATGCATC  
AGAATCACCT GGATGACTTG CGAAAACACA AATAATCAGA CTTAATCCCT ACATTTTCTG ATTTAGCAGG TATAGAATGA  
GGTTTAAGAA TTCTAACAA GTTCCCAGAT GCGTAAGGT GTCTCTCAGG GTTTTACTT GAGCAACTGG GTGGATCCNG  
TGGATCTTAT GTCCCTNCGA GTAAGGGGTC AGGTACAGCA TTCTCCGTC AGATTGTTT

SEQ ID NO:1781: (Length of Sequence = 420 Nucleotides)

GAAAGCACAG GAGCCTGCTT CCAAAGAGGG ACTGTCCCGT AATTNAGAGA TGCTCCAAGG CTGACCATCC TCCITCTCCT  
GCTGCACACC CAGCAGCCAT CTATGGCTGG ATTTGGAGAA TTTCTGGTCA AACCCTGAG TATGAGGAGA GCAGGGCAGT  
TGGGGAGAGA GGTCCAGCC CAATTCTGCC CAGAGAAGCT CCCAAAGAG AGGGAAGTGT CCTGATGAAG AGCCCATGAA  
AGGGGTGAGA CCCAGGAGG TGTGGAGATT GCTGCGGGCT CCTCTGGTCA GTAAGGAACC CTGACAAGAT CCCTAGGATG  
GGGGTCCCTT AGTCTCACTG AAGTCTTGT AACTINGGA TGGGGCCAGC TCANCCCTCT CTGATACCCG AGCTACAMAT  
CTGGCTTCCC AMTCTAGAG

SEQ ID NO:1783: (Length of Sequence = 427 Nucleotides)



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AGAGCTTAGC ATGCTGTGG TCATGTTTT TATGTGTTA TTTCACATTG ACTTTTGCCG TGAGCTTTGA GGGAGACAAC  
 ACCATCACAT ATGTGTAAAT TGTAAAAGAA TTGGGAGAGA ATAGCTTTGG GAGATCATT TCTTACTGGC CATGATGAAG  
 AAAGCTGTAT CGTAGGAAAA TTACTAGGTA ATTTTACTCA CTGTATAAAG TTAATTGCA AGGTATCATT CGATTGGTAG  
 AGTTACCAAA ATGAGAGTTA AAGAAACAGA AATATGGTTT CAGTTTATGG TGCATTCTTA TCTTTTTCAC TGAGTCTATT  
 TCTGTCTGGT TGCTTCACTT AGTACTCCAA CCAGACAAGA GGAAGACAAC TATGCTAGTG TTTTAGGAAA TGGGACAGAA  
 TGGGGTGATT TAAGTAGGAG CCGGGT

SEQ ID NO:1784: (Length of Sequence = 428 Nucleotides)

ATGGGATACT AATGCAAGCA TTCAGTGAAA AAAGTAGATT ACCAACTAT ACGATCCTCA TTTATTTTAA AAAGTGATAT  
 CACCCAGAAA AAAATAAGAA AGATAAAGA TGTGGTAAA ATAACATAAG AATAAAAAATA TAGGGGAAAA GGTAGCCAAG  
 GGATAGATAT TGATATTCAT TTCTTTTAA CAACTTTTAT AAGTTGTAAT TTGTGTGCAA CAGATTGCAT ATATTGGANG  
 TATATACTT GACTAATTTT GACAAATATA TACACCCATG AAACATCCAG TTATAATTTT AAACATTTTC ATGGCCCTCC  
 AAAGTTTCCT TGTGTCTTT TGCAATACAC GCAAAACAC ACACCCCA CACAGTATGT AGGCAACCA TTGATCTGCC  
 TTCTGTTACA ATAGGGTAGG TTGCATC

SEQ ID NO:1785: (Length of Sequence = 414 Nucleotides)

GTAACAGAT TACATTGAA CACCTAATA AGTATTGTT TCATAATCAT TACATGCTTG TTTATGATTT ACAAAGATTT  
 GGTAGAGAAA AGTACAGTCC TTAAGGCATA TATATGCCAA TGCATTAAAC TACTCAGCTT TTGTGCCAGC TCAGGTGTTT  
 ATAGGAACAG GAATGTGGAA TACCAGCTTT TACTTTTAA TACTTTTAA TGCTGAATTT TTCTCCAGT TAAACCTTTA  
 ATTACACTAG TATGTAAAGT AGTTACTGAG AAAATAAGT TTTTGATTTT CCTTCTGTG GATCTGTAC ATTTTAAAT  
 GGAGCTATTT AACACATGAC ATGCTAATGT TACTTAATGG GTCTCTGCAT TTTAATTTA NGAAACACAA ACCTGGGTCA  
 CAAAACATCT TCAG

SEQ ID NO:1786: (Length of Sequence = 397 Nucleotides)

GTTATCCAA CCAAAATTT CTAAGATGA AATGCAGAA CTACAGAAT TGAGTAAAA GACAAAAACG TAAATACTAA  
 ATATTGAAAA GATGCAAGTN CTCCCAAAT AACTCATAG ATTTAATAAA ATTCAAATTT AAAGGCAATT AATTAGGGAT  
 GAGGCAAGAA TCTGGGAAGA AAATTAATCT GAAGTTTGT TGGAAAAATC AATGGGTGAA ACGAAAATAT TTTAGGATAA  
 GATTAATGAG AAGTAAATTT ATTTCAATTA TAAANGTAA ATGATAAAT AGTTAGACCT ATATGGTACT GATGCCAGGN  
 ATGTTATACA AAGCTACGTC AAGGCTTGAG GATAATTTN TTGAAGATAT TCGTGGGTAT CTCATTGGCT ATAAAG

SEQ ID NO:1787: (Length of Sequence = 408 Nucleotides)

TCCACAAT GACAATATAT ATGCATGTGT TTAAACCAA TCCAGAAAGC TTAAACAATA GAGCTGCATA ATAGTATTTA  
 TTAAAGAATC AACTGTGTA ACATGAGAAT AACTTAAGGN TTCTAGTTTA GTTTTGTGTA ATTGCAAAT ATATTTTNC  
 TGCTGATATA TTAGAATAAT TTTTAAATGT CATCTTGAAA TAGAAATATG TATTTTAAGC ACTCAAGCAA AGGTAAATGC  
 ACACGTTTTA AATGIGTGTG TTGCTAATTT TTCCATAAG ANTTGTAAAC ATTGAACGA ACAAATTACC TATAATGGAT  
 TTGGGTTAAT GACTTATGAG CAAAGCTGGT TTGGCCAGAC AGTATACCA ANCTTTTATA TAATATCCAG ANGGCTATCA  
 CACTGTG

SEQ ID NO:1788: (Length of Sequence = 391 Nucleotides)

CACTTGGAA CAACTTTTA TTTTGAATGC TGGTCTGATC AGTCCACGEC CAGGGTAGG TGGTAAATC AATAGCTG  
 AAGGAGGGGA GGAGAGGGGA CCAGCAGTCC GCAAGCAGGA GGAAAGGAAA GGGTTGGGGA CAGGAGGAGG CAAGGCTGAG  
 GAAGGACCCA GCCAGCTGGG TGTCTGCCCC GGCTAGAGAA GGAACACCC CCACCCACCA GGCTACCTC CATCTGTGGC

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TTCAGTGCAG AAGTCAGTCC AGGTGGGTTC AGGCCCATGC CACCTTCTCT GGCCTGCACA GTCCCACCCC AGGCAAGGGG  
TTCTTTCCAG AAAGGCTAAA TGCTCTGTCC TAANCCTNGG AAGTGTCCCT TTCAACTAAA CCCCTGGCCT T

SEQ ID NO:1789: (Length of Sequence = 312 Nucleotides)

CAGGGTGAAG TGAGCCTGTG TGGGAAATGA GTCTAGTGTG AGGAGGCCTG GCTGCTATAA TGATATTTAT CTCACAGTTT  
ATATTTTCATT CATTATATTT ATTTTTTTAA AAGGTTTCTT TATCAGCTAC TAAACATCTC AGCAATTTGG TGTGCATAGC  
TCTAGATTAA GCAACAAAGA ATTGTAAGTA TAACAAACCA CAGGGGAAAT GGTGGTTAGT AAGAGTCAGC CTTATAAAAT  
TTACATCCAC ACTGTTTCAC AGCAAGATTG CTCTCTCCA AACGTAGCCA TCAAAAGCAG CAAACAAACC CT

SEQ ID NO:1790: (Length of Sequence = 281 Nucleotides)

TGTTTCCYTC ATTAGCTGTA GACTATCCCC TCTCTCCCA CCACAWTGT TCTWTGATGA KTTACAAACA GAAAGGAAAT  
CACATTTTCA TACTAAAAAC AAAATGWTCA GAGCCTTGAT TTYTCCACTA GAWACTACAC GTACAGTTAA GAGTCCACAT  
GCAACACCTT AAWTCACAGA CTGAGACCTC ACATTYTGAC CTGGAGNTTC CTCCCTTCC CCAGCCTTGG GCTAGCTTTG  
GCCTAGGCTC AKGTAATACT GACACCCACA GGCCTGTCTC T

SEQ ID NO:1791: (Length of Sequence = 261 Nucleotides)

AGGCAAAGCA GAAAGGTGTG TTTGCCAGAC CAGCATGGGC AGCTCAGAGG GAGCAAAGCA TCCACCAGAA GAGGCTCTCC  
ATTTTTTTGT AGGGCCTGAC AGTIGAGATT TGAGGCTGAG TTAACAWTGG GACCACTGAA CTTTTTTCCA ATGGAAGAAAT  
CACGGCCCAG TCCACAGGA ACTTTGCGGC ATACCAAACA ACAWTGAGGA AGGAAGGGCC GGTGGCTCT ACCAAACAKT  
TCAGGTCCAC TGGGTGAWTG A

SEQ ID NO:1792: (Length of Sequence = 324 Nucleotides)

CTCCATCTTT ATCGGCTGTA TAAACATCTC TGGTCTGTAC ATACATTTCA TACATGTTAG GGTGGGAAGC GAGGGCCAAA  
GGGAGGCCCA GCAGCACAAC AGCTCACCCG CTTTCCCTAC AGCCCTACCC GCTCTGTGCA AACCAGGCC AACAGCTCCT  
GCTGCTCTTT CTTCCCTGGA AAAGTCACTG TTATGGGGAG GGGGCCAGG GTTGAAGGAT TAGAAGGAGA TAGAGGGCTT  
GGTGGGAGG CCACATNTAA GTCCTAGATT CAAACACTGA AGCGAAACAG GCAACTGGCA CAAGCAGCAA GCTTAGGCAT  
GGGC

SEQ ID NO:1793: (Length of Sequence = 386 Nucleotides)

ACTCTTGGGG ACCCAAAGAT GTCAGGTCCC CATACTCTGA GGAATCAGGA CACAGCCCG TGCCTGACAC CACAGAGTGA  
GGCAGCCCTT CGGGTGAGGG CCTGGGCCTC GAGGGATGGC AGCCACCACT GCCTAGGCAA ACGCACCTGG GGCTGAACTT  
GGCGCCCGGC ACTTTNAGGA CGCCAGCACC AGTGGGCACT CGGAAGTGCC AGTTCTGGCC CAAATTTGGT GACCTGGGTC  
AGAAGGACCT TTCAGAATGA NTGTTCCCG TCAGCAGATA CCGTCAAGAC ACGGCTGGCT CTGAGAGGGG CTGGGTGCCC  
GTTTGGCTG TATTCTCTG GGGGCCAGCA CGTCTCAGAG GGTGTCCCTG TGGGTCCCCG GGTGCA

SEQ ID NO:1794: (Length of Sequence = 308 Nucleotides)

GGATGCTCTT TAAACATGC AAATTGGGCC GGGCACAGTG GCTCATGCCT GTAATCCAG CACTTTGGGA GGCCGAAGTG  
GGTGGGTCAC CTGAGGTCAG GAGTCAAGA CCAGCCTGGC CAGCATGGTG AAACCTCATC TCTGCTGAAA ATACAAAAAT  
TGGCCAGGCG TGGTGGCATC TGCTGTAAAT TCCAGCTACT CGGGAGGTTG AGGCGGAGGA GTTGTGTGAA CCGCGGAGT  
GGAGGTTGCA GTGAGCCGAG ATTGCACCAT TGCACTCCAG CCTGGGGTGA CAGAGCCAGA CTCTGCT

SEQ ID NO:1795: (Length of Sequence = 418 Nucleotides)

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GAAACGCTAA GGTTTTGACA GCGTTACAGT GAATTCTCCG GCTGTAGAGA TTGGAGGAAG TCGGGAGAAA TTGCTCTCTA  
AGTTGTAAGG TGGAACAGCA TTCATTTTCT TACTGCCAAT GGAGGTTTTT CATGAATTTA CTAAGTCAGT AAAAAGATTG  
GGCTTTTTTT TTTTAATCTT AAAGGATCAC GCTTTAAACC TCTGTAACAA AGTAATTATT TGTACCACCT TCTACCCAC  
CCTCCAACAA AATAACCTAT CGGNTCTCAG AAAATAATAA CCTTTTGCTT GCCTTTGAAA TAGTTATCCT TTTTAGTATG  
ACAGTGTTC AAAATCTTTT TCTTAGACTT GTAGCAGAAC ATAGCTATGA TGATCTGAAT TTTTCTCTTT CAGCTGTGTC  
TAAGACGAGG GGGACTCC

SEQ ID NO:1796: (Length of Sequence = 416 Nucleotides)

CTTTATTACA TATGCAACCT TGCCATGCCT GCCAGTTAAC TCCCCTCCCG CCAATGTTAT CCTCATGATA TCAGCTCCCT  
CTTGGGGCCA CTGAGCTGCC CCCCTTTTCT TCTGGGCTGG AGTAGTGGTG CCCCTCAAGC AGGCAATGGG CAGGGGGAGA  
TCCACAATTA ATGTGTGCAG TTCTCTTAAA AGTATTAACT CTTAAATAAG CACTCTTGGG GAGTTGCAAA GGATATTGAG  
GATGGGATGC AGTGGGAGGC TACCCCTCAT CCAAGGTACA GGCTGGAATG AGCTACAGCT GGGTCTATCG TGGGCTCAG  
AAGGTGAAGA GGGACCTAT TCTGGGCTT AGTGTGGTG GGCATATCC TCCCAAACT TGTTCTGTGG GCGATGTTCT  
TCACATCTAG GAGAGC

SEQ ID NO:1797: (Length of Sequence = 298 Nucleotides)

AGGAGGGAAA CCAGAACAA ACTACTACTT CTAGATGAAC ACAGGCTCTT GAGAGTCCCC AAGAGAGGAG GCTGTTGATC  
CAATCTGAC TCAGACTACC TACCTGGCTT CCTGGCCCTA GGAGGTAATA ATGATAGTNT CAGGGGGTCC ATGTAGCAAT  
CCAAGCAAT CCTGAGGTGA GAGCAAGCAA AGAGGATAGG ATGAAGGGAA GGCAGGCAA GAATGTGCTC CTAGTAAGAA  
GCAACTCTNT TCCACTCACT TCCTTTTGCT CTNTGGCAGG CAAGTCAACT GGGTTCTC

SEQ ID NO:1798: (Length of Sequence = 245 Nucleotides)

CTGTCCATT TTTACAACAN ATACATCCAA AACACTATAT AATANNITTT TTTACAACAT TTCCAAATGA GAAGATTGCT  
TTTCCCCCA CTACTGCTAT TCACACACAG TACTTCCAG GCACAATACA TTAGGAGATC TAAANTGCT CACCCTGTAC  
TCTAGGCTGC TTAGGAAATG TGAAACTAG NAACATTAT AATGGCAITA GCTCCTTTCA ATACAAGGCA ACATTTTAGN  
AACCT

SEQ ID NO:1799: (Length of Sequence = 312 Nucleotides)

GAAATGTTAG GCTAGTTAGA AGGACACGGC AATAGCCTTG AGATTYTCAA CCAGGGTAGT GTATTAGAWG TAAAAAGGAG  
AGGAAAGATT TGAGAGTTAT CTCAGAAACA GAACCATCTA ATTTTTTTGG ACTGATTGTA CTGCTCTTTC ACTCATTTTT  
TTATTCATC AACAACTATT TTTGATGNT TTGGATGGGT CAGACATTGC GCTAAGTGAA AAATAGGAAG GTAAGAAAAA  
GAAGACTCTG AAGATGAATT CCTCCCCAA AACTGAGCTA CTAGCTATTA CTCAGTGGGG CTGAAGTGAC AC

SEQ ID NO:1800: (Length of Sequence = 309 Nucleotides)

GGCATGTGAC ACTAGGCCAC AAGCGATAAG CACAGGCACC TGACTTTTAA GTTTTGTGTT GTTTGTGTT TCCCAAAGTG  
CTGATAACAA TAACAACAAC AATAGGATTC CAACCAGNG CCTCAAGTGA CAGCCAGNA GAGACCTGAA GGTGGGGCC  
ACCAATATGC CAAATCGTTT CTAAAGGAAG CTGAAAATG GGACTGTCTT TTGCCACTT CGTTGTGTTA AAAGGGGACA  
TTTGTCNCAA CTNCCCAACC GAGTTCTAGA AGTCTCTGAC AAGGAGGCAG CATCCAGCT TGACCAGG

SEQ ID NO:1801: (Length of Sequence = 166 Nucleotides)

CAAAANTTAC TCTGCAAAAT TAATATATGA TTTACCTGCT GTTNTCATAA GATTTCCAAA TAGACAAACT CGGTATGCTT  
NCGATTTGCT TTACATTCTA AGTGGATTG GAGGTTGAGG CAGGCGCCAA GGAGTNAAGC GAAGTTTCAT CANGCGGAGA  
TGTTGG

SEQ ID NO:1802: (Length of Sequence = 281 Nucleotides)

GGTGGATGTC TTTGGGCGCA GGATGGAGCC CAGACCCAGT GGTACAGTGG TGGAGCTCTC TCCTGTGCC CTGACTCTGG  
CCAAGGAAGT GAATGCAAAG CAGCAGGGAG GAGGCAGGGT GGGGACGGCC CTCTGAGCTC TCCGCGATGG CTGGCGTGAG  
GTGCTCTTAA GACTTCTNGG CAGCCCTGCC TTCCCTACTC AGTCTTCCCG ATCTTNTTGC CACCTTTCCTG TGTGGGCCAG  
NCTCCCGCCA GGTACTCAGA GGCCGCTCAG AGGGCAGGGT T

SEQ ID NO:1803: (Length of Sequence = 429 Nucleotides)

TTACAGTTA TAGTTGGGGA CATTAAACAC CCTTCTCAA TAATTGATAG ACTACTAAAT AAAAAACCAT GAAGGATATA  
CAAGAACTGT ACAACACTGG CCGGGTGTGG TGNCTCATGC CTGTAATCCC AGCACTTTGG GAGGCTGAGG CCGGTGGTNC  
ACTTGAGGTC AGGAGTTGGA GACCAGCCTA GCCAATATGG CGAAACCACA TCTCTACTAA AAATACAAAA AAATTAGGCT  
GGCTGTGGTT GGCTTAATGC CTGTAATCCC AGCACTTTGG GAGGCCAAGG TGGGCATATC ACCTGAGGTC AGGAGTTTGA  
GACCAGCCTG AAAAATATGG TGGAAACCCA TCTCTACTAA AAATACAAAA ATTAGCTGGG TGNGTGTGGT CTGAAAAAAT  
TAGGTAACT CGTCTCAA AAATAATAA

SEQ ID NO:1804: (Length of Sequence = 278 Nucleotides)

GACCTGAAGC TCAAAGTCTC TCTCCTTACA CAACCAGCGN CAACAGGGCC AAGCTACTGG CTAAGAACAG ACAAACTTTC  
CTGCTTCAGA CCACAAAGCT GACCCGINTT GCCAGACGCA TGTGCAGGGN CTTNTTACAG CCAAGGAGGG CCGCCCGAGC  
GNTTATGCT CCTATCAATG CCAATGNCAT CAAAGCAGAG TGCTCCATTC GNTTCTTAA GNGCNCAG ACTCCATTNA  
AGATTCACCC TCCGTGTGG GCTGNCCTG GGAATAT

SEQ ID NO:1805: (Length of Sequence = 349 Nucleotides)

GATCCATGG CCGAGGGCGG CAGCAGCAGG GCGGGGCGG GCGGGCTCC GCAGGTGTA ATCTGAAGGA GTGGCTGAGG  
GAGCAATTTT NTGATCATCC GCTGGAGCAC TGTGAGGACA CGAGGCTCCA TGATGCAGCT TACGTGCGGG ACCTCCAGAC  
CCTCAGGAGC CTATTGCAAG AGGAGAGCTA CCGAGCGGC ATCAACGAGA AGTCTGTCTG GTGCTGTGGC TGGCTCCCTT  
GCACACCGTT NCGAATGCG GCCACTGCAG GCCATGGGAG CTGTNTGAC TTCTCATCC GGAAGGGGGC CGAGGTGGAT  
CTNGTGGAG TAAAAGGACA GACGGCCCT

SEQ ID NO:1806: (Length of Sequence = 403 Nucleotides)

GTGAGTGTG GCCAGATCTT TTCTAGTAAA ATGTGTGTTA CTGATGGGCA GACAGCTCTC ATTCAAGCAG TGACAGATGT  
AAGCNCCTCC CATTTTGTG GCGCATGTG ATTCAGCGTG TGGCTTCCAA GTTGCTGGG ATCATCTCCA CCCAGACTAA  
GGAAGAGGAA AGAGCTTGGG CAAGTGCCT TGGCTGTGTT TATGATCA GCAAGGAAT TGGCTCCAAC ACATTAGCTC  
ACATTCATT GGTAGAACT GGGTTTCTCA ACTATTAGTA CAGGGTGAGT GTAGGGTTTT GGCACCATGG GCATTTGAGC  
TGGCCAAAGG CTAATCAGAG TTAGAACAAA GCCACAAAGC CTGTGAATGG TGTATTGTG TGTGAGGAGC TGTCTGTGTC  
ATT

SEQ ID NO:1807: (Length of Sequence = 426 Nucleotides)

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GTCTCTAGCT TCACTCTGGC ACCACTGTGA GCACCGGGAA ACCTACCAGA AGTTGCTGGA GGACATGCT GTCTGCACC  
 GCTTGGCTGC CGCCTCTCC AGCCGAGCTG AGGTGGTAGG CGCGTCCG CAGGAAAAGC GCATGTGAA AGCAACGGAA  
 GTGATGATGC AGTATGTGA GAATCTAAG AGGACGTATG AGAAGGACCA TGCGGAGTCA TGGAGTTTAA AAAGCTTGCA  
 AATCAGAATT CAAGCCGAG CTGTGGCCCC TCTGATGGG TCCCTGCGAC GGCAAGGTCC ATGTCCCTCA CGCTGGGAAA  
 GAATATGCCT CGCCGAGGG TCAGCGTTGC TGTGTTTCT AAGTTTAATG CCTGAATCT GCCTGGGCAA ACTNCCAGCT  
 CATCATCCAT TCCTCTTAC CAGCTT

SEQ ID NO:1808: (Length of Sequence = 431 Nucleotides)

GGTACTTTTC CATTTAGATT CAAATGGAGC TAAATTAAG AGTTTATGA GCTGTTAGA ATGAGGTAGT TTCTCCTAGG  
 ACCCCCCAAA GACAGTGCAA GTAATGACG TTTGGNTCTC ATTGCTCGAT CTTTGATAGT ATGINCTGGA GTCTACTCCC  
 CAGGAGCCAG GACAGGCGTG AAGATGGAGT CCTGTGCGA GCTGGAGCCT TGCTAGCTG GTGATCACAC AGCCTGCTCT  
 GTACCTGCAC CCACTGGAT GGTGGTACAT GGTGGCAGG ACAGGACCAC ACCAGTTAA GGCCAGACCA GGCTGAGTGT  
 GACCCCTGAG GTAAACACTT CACTAAGCTG TGTCTGTTC ATGCCCCCTG CTCAGTGAAA GGTGAGTCCC GAGACCACTT  
 GGTACTCTT CTTATGCGAA CCAGAGACAT T

SEQ ID NO:1809: (Length of Sequence = 401 Nucleotides)

CGTGAGGCCT TGAGCACAAG TGCAAGCGG ACATCCTGCT CGCGCGGCTC CGGAGCTCG AGGACCAGAC CTGGAAGCGG  
 ATCCGCCCCC GGCCCACTAA GACCAGCTTC GTGGGCTCT ACTACCTGTG CAAAGGAGGA GATCGACGTG TGGACCGAGG  
 AGCGGAAGGG CACCTCAAC CGGACCTGC TCTTGACCC GCTGGGGGT GTTAAGCGG GCAGCTCACC ATCGCCAAGC  
 TCCTGAAGGA GCACAGGGC ATCTTCACT TCCTCTCGA GATCTGCTTT GACAGTAAAC CCGGATCAT CAGCAAAGGC  
 ACCAAGGACT CTCGCTCTG TGTCTCAAC CTGGGCTGCC AAGAAGAGCT TTTTACAACA ACAAGTGCCT GGTGCACATC  
 G

SEQ ID NO:1810: (Length of Sequence = 233 Nucleotides)

AAGTGCTATA TTCATTGTAT TATAGAGAAG GTTGGGGAGC ACAGAAGAGG ATCAACCCAG CTTTGAAGG ATTAGAGAAA  
 GCTTCCAGAG GGGTGGACAT TTGAGCTAGC AAGAAAGCAC AAGGGAAAAG GCATTTAGAC AGAGGAGACA ATTTGTCTGT  
 ACCCAGAAGC ATTGGGGTAT GCTATGCATG GATAGNCAA GAATTTTTCG AAAAGGGGGG CCAGCAAGGC ATT

SEQ ID NO:1811: (Length of Sequence = 423 Nucleotides)

CAAAGAAAGA GTTGAATAT GTACATTGAA AAAAGGAAG ACATTTTTTC ATACCAACT TTCCCTAGTT CGCAGTTTCT  
 GAATAGTAGA AACAAAACAC ATTTTAAAT CTTCTATCA ATTAAATTGA GGAGGAAGTA ACACAACCTT TATAATTAA  
 CACTGAAGTT GTCTTTAAGG ACAAACCTA AATTTTAAAA TGGGTGTTAC CATATTINAT GAGTGGACTG ACTCCAAGGT  
 TGCTTGCTC CAAGNNIGGG CATGTGACA TTGCGTGAT GCCAGAGAAG AAGTTAATGG CAATGATGTC CAGTCAGAGG  
 GCAGACATGC TACACATCAC AATGATGAGA GCTGCGGGAT TCTGCCCTCT TCAACTTCCA AGTAGNAAT TATTATTTTC  
 CATTCAAAC AACTGGGAGT GAG

SEQ ID NO:1812: (Length of Sequence = 394 Nucleotides)

GACCAGCCTG GCAACTTAGT GAGACTCTGT TTCAGGAAAA AAAAAAAA GTGTATTGG CTGTTCTGAA GCAGGCCATC  
 ATCACCTTC ACCTCACCA CAGGTGGCTC TGGGGGCTG GTCCATGGGC GGCTGTGGC TTAGGATGGA GTCTAGCTG  
 TGACCTGTGC CCAGGAGGGC GTGATCCAG TGAAGCCCA GGTCTCAGG AGTAGCTGT AGGAGGCTG TCCAGCTTC  
 CCTGGGGCTT CAAGAACCTC CCATCTATCC CCATTCTGA GACAGGAGTT ACAGTCCCTT TTGNCCTNA CATCCAATA

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AGAGACTGAT ACCACTGGAG TGGCTGGCTT TTAATTCCCC TGGGCCAGAC CTGCAGCCTT GCCTTAATCC TTAA

SEQ ID NO:1813: (Length of Sequence = 344 Nucleotides)

CATCAGCGAC AGGTCTCCCT CCCAGAACCC CATCAGGACA GGAGAAAAGG CAGCAAGAGA GGTGGGGTGG TCCTGGCAGG  
TGGGCCACCA GTNTCTGAA TGAAGAGTGA GTCCCGGGT AGGAGTCCAC ATCAGGTGTG GGCTGCTTCC AATCTGTAGG  
TTCTCCTGGA GATTNTCACA ATCTGCCAGC TCTCTGGGAA TCACAGAACC ATCATGTCCC CTTAGGATGG CAGAAGATGT  
GGCACAGCCT CAATCTCCAA CACTGAAACA CTNAGAGAGC TTGATACGTT CCTTAGGCAG GGCAGAAACA TCACAGCACT  
TCACGNTAGG AACCAAGAAA GAGT

SEQ ID NO:1814: (Length of Sequence = 442 Nucleotides)

GACACAGCAG GCCCCTGCCC CTGAAGGAGA CTGCATTGGA ATTTTGGCCA GGTGGCCCTG ACACATAGGA ATGCCCAACT  
ACTGTGACTA CCTCTGAGA TAAAAAGCTG TCCTACTGAT TTTAGAAGGC CAAAATTAGA GGTCATTTTG GAGGTCATGC  
CAGTGGACAT ATAACAGTTT GAAATGCTTG TTCCCGGTG CCGTAAAGAA ATAGTACTTG AACTTAAATT TATTACGAA  
GGCCATTTTT ATTTTCTGCA GAAAGGGTAC ACTTGGCAGC AGTTTINCCA CGAGAGTACC CCGAACAAG GAGACAGGGT  
CATTTATAAC CTGACGCGTC CACCTTCTG CTGTGTCCGG TTTCCATTGG CTGGAACAGG ACCTCACATT CTGTATTGT  
CCCGATTGGC TAGCAACTTA GGACTTATTA AAAGAGGCAA AG

SEQ ID NO:1815: (Length of Sequence = 299 Nucleotides)

GCAGAGAATC CCTTGAACCT GGNAGGCGGA GGTTCAGTG AGCGAGATC ACGCCACTGG ACTCCAGCCT GGACAACAAG  
AAGGAACTC CATCTCAAAA AAAATTGAAA AAAAATTCA GANATACAGA ATGCAAAANG GGACCAAAAA AGTACCAAAA  
ATTTCAAAAT TTGTAAAC TGTACAAAT CTGNTACGA AGCGTATTT TTGCCACAG GGCACCTCCC TGGAAAGNCG  
TTACAATAGC TNAGGCTTCC TCTTCAGATA GANTTAGAGT GGCACTAGGA TAGGCTCTT

SEQ ID NO:1816: (Length of Sequence = 286 Nucleotides)

ACCCCGGGT CCAGGTATGC TCCACCTCC ACCTGCCCCA CTCACCACCT CTGCTAGTTC CAGACACCTC CACGCCACC  
TGGTCTCTC CCATGCCCCA CAAAAGGGG GGCACGAGG ACGAGCTTAG CTGAGCTGGG AGGAGCAGGG TGAGGGTGGG  
CGACCCAGGA TTCCCCCTCC CCTTCCAAA TAAAGATGAG GGTACTAAAG TTGTCTGGT TTTTATTTTA TTATTATTT  
TTCTTTTTC CAGTATACTA GCTGTCTTT TAAGAAAGGG GATATT

SEQ ID NO:1817: (Length of Sequence = 320 Nucleotides)

GAAAGGAAG CCAGGGTGG AGGAAGGATC AGCTAAATCT GAGGGAAGAA GAAGGAAGG AGAGGGACTA TTGCATAGCA  
GATGCAAATG AAGGGACTGT CTTATTATAC AGTTTATCA TCTGTAATA CTCATAATCT TGTTCTTTT TCACTTTTA  
TATAATTTA TCTTACATT AGTTAAATCA AAAATCTTAA AACACATTTT AAACGTGGT ATAGGTACT TTTATATATT  
ATGAATTTA TAATAACAT GTTCTTTNC TGGAACTGG GATGNACN CGATGGTGT TCTTGAATAT AAGAGTGTCC

SEQ ID NO:1818: (Length of Sequence = 356 Nucleotides)

CCCAGGAGGC TGAGGCAGGA GAATCGCTG AACCGGGAG GCAGAGGTTG CAGTGAGCCG GGATTGTGCC ACTGCACTCC  
AGCCTGGTGA CAGAGCGAGA GTTCATCCAG ACACACACAT ATATATATAA TTNCCAAACA GGCTTACTA AACCCCTGA  
GGTCTCATGA CACAGTAGAA AATCATGATT TAGTAGAAAG AGCATGGTGC TAGGAATCCA GTAGATCAGT AAGCTAGT  
TAGAGTCCA AATCTGCCAC TTTCAATCTG TATGGCTTA GGCAAGTTAC TTAANCTTTC TGTCTACTG TTTCTTTAT  
AAAATGGGG ATAATAATAG TAACTTCTC ATAGGG

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SEQ ID NO:1819: (Length of Sequence = 328 Nucleotides)

CCACTCCCTGT AACCTGCTGG ATGACTCTGC ACTGCCCTTC TTCATCCTCA CCAGTGTCTT GGGTATCCTA GCTAGCAGCA  
 CTGTCTCTTT CATGCTTTTIN AGACCTCTCT TCCGCTGGCA GCTCTGCCCT GGCTGGCCTG TCCTGGCACA GCTGGCTGTG  
 GGCAGTGGCC TCTTCAGCAT TGTGGTGGCC GTTTTGGCCC CAGGGCTAGG TAGCACTCGC AGCTCTGCCC TGTGTAGCCT  
 GGGCTACTGT GTCTGGTATG GCTCAGCCTT TGNCCAGGCT TTGCTGCTAA GGGTGCCATG CCTCCCTGGG NCACAGACTG  
 GGTGCAGG

SEQ ID NO:1820: (Length of Sequence = 359 Nucleotides)

CCACCATGCT CTGCACTCGC NCTGGTACCA GGCCCGGAC CTCATGCTCA TGAGCCACTT GCAGGACAAC ATTCAGCATG  
 CAGACCCGCC AGTGCAATC CTTTACAACC GCACCATGGT GCAGCTGGGC ATCTGTGCC TCCGCCAAGG CTTGACCAAG  
 GACGCACACA ACGCCCTGCT GGACATCCAG TCGAGTGGCC GAGCCAAGGA GCTTTTNGGC CAGGGCCTGC TGCTGCGCAG  
 CTTGCAGGAG CGCAACCAGG AGCAGGAGAA GTTGGAGCGG CGCCGTCAAG TCCCTTCCA ACTGCACATC AACCTNGAGC  
 TGCTGGAGT TGTGTTTANC TGGTGTCTGC CATGTTCTT

SEQ ID NO:1821: (Length of Sequence = 208 Nucleotides)

CCTGGGTCTG TGACCCAGAG TTCCAACACA AAGACACTTT GTACTGGAAC GCTGGAGCCA TTCCAACATG AACAGCAAGA  
 ATAGAACCCTG TGCTGGCTGG TCTAAGATCA AACCTCGNGA TGGTGGTTTG AAGTNCCTCT TCAAGAAAG CTGAAAATG  
 AAATCTCAGT TAGGCAAGNC AGATAAAAGC AGAGTTATTC TGGTGGCG

SEQ ID NO:1822: (Length of Sequence = 314 Nucleotides)

GGATGINTTG AGCCAGAGTT TAAGCCTGAC ACACAGGCTT TGGTCTCAC TGAGCTGTCT CCAAGACTGG AACTACTTAG  
 TGACTGGCA AATTTTCTGC CCCCCACCCC TCATCAAAGC TGCTAGTTCA GATGTTGACA GTGTTTTCAT GAATGTTGGA  
 ATCTTACTAG TCCAGACTTA CTTAGGATGT TGTGGGGAA GGCACCTGGG ATTTTCTGTG TCTTGCAATC ACAGAGGGAG  
 GCCATTTTCA ATTCAAGAGC ATTGATTAG GGGATCTGA GGCAGGGATG CTACTGCGKA TTTCTCTCTT CAGG

SEQ ID NO:1823: (Length of Sequence = 344 Nucleotides)

AACAATTTTG TCTTTACTAC ATCTTAAAGA ATTAGACTT GGGTTGGTGT AAGTGACTTA CTTCAGGNN ATCATGCTCT  
 ATTTCTACCA GCAGTTCATA CCCNAATGTC AACTATCTA TTGTTAACCA TGAATGNTAT TCAGATCTAT TACTTTTCGT  
 GAAAAGTGA ACATGTTACT TCCAACCATG GCTGTCCACC GTGAGTGTGA TCANTTTNT CCAAAACCAC ATGGGTGCGA  
 GGAGCTAAGG GGTGGTACCC MAATGTTAGG GACAGTGTTA GGAAGGGCA AGGGAAGA AGTGACTINGA TGTCTTATGA  
 GRAACCCGTA AATGGCTTAA AAAA

SEQ ID NO:1824: (Length of Sequence = 340 Nucleotides)

GTGAGTGGCA GGTATCATGA ACCACATGTT GGACCTGGAG TTGCTAGGAC CTTTCTGCC ATTACACAGA AAAATCCTCC  
 CTGAGAACAC AGCCATNGA GGNACATGG CAGAGGAAGA TAAGACAATA AACAGAGNCA CATAATTATG GCCAGCGTGG  
 GGGCINACGG CTGTAATCCC AAAACTTTNG GAGGCGGAGG TGGGCAGATC ACCTAAGGTC AGGAGTTTGA GGCCAMCCTG  
 GGCAACATGG TGAAACCCGT CTCTACTAAA AATACAAAA TTAGCCSGGC GTGGTGGCAC GGGCCTGTAG TECTAGCTAC  
 TCAGAGGGTT AGGCAGGAGA

SEQ ID NO:1825: (Length of Sequence = 357 Nucleotides)

AATTTGGTTG TGGCCAAAT CTCAGTCCAA TCACCTGGC CCAGGGCCTG GCGTGGGAGG ATGTGGCAGG CTCTGTCTCC  
 TTCTGGGGTT CCTGGTCTGG AGGAGTCTCC CCAACAGCG CAAAGCTGGC TGTTTCCGC CCAAGCCCC AGAAGTTTGA

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ATGAGAGGCA AATCTACCCT GAATGCACCT CCCTCCTAGG CTGGGTGAGG TCACGCAGAC ACAGAAGGGC AGGACAGAAC  
TCCCCATCTT CTGGGGGCCA ATTCTGCTGG AACTGTGCG GTCANCTTCC TTTTAAAGT GCCAGTATCG GTGGGGCAGG  
AAGGGACTCT CAGGGCTGAG CAGAGCCTTC TTCAGCG

SEQ ID NO:1826: (Length of Sequence = 207 Nucleotides)

COGGCCCCCTT CAGTCCCCAG CCCCTGCCCC AACTCCGACT CTTGCACCCA GCCCGGCTTC AGCCCCGATT CCGACTCCCA  
CCCCGGCACC AGCCCCCTGCC CCAGCTGCAG CCCAGCCGG CAGCACAGGG ACTGGGGGGC CCGGGGTAGG AAGTGGGGGG  
GCCGGGAGCG GGGGGGATCC GGCTCGACCT GGCTTAGCC AGCAGCA

SEQ ID NO:1827: (Length of Sequence = 309 Nucleotides)

GTTGTGGCCT GTAGTCCCAG CTACTCCGCA GGCTGAGACA GGAGAATCGC TTGAACCCCTG GAGGCGGAGG TTGCATTGAA  
CCGAGATCGC ACCACTGTAC TCCAGCCTGG GTGACAGAGC GAGACTCCAT CTATAAAATA AAATAAAATA AAATAAAATA  
AAATAAATAA AATAAAATAA AATAAAATAA AATAAAATAA AATAAAATAA TAAATAAAAA TAAATAAAAA TAAATATATA  
AATAAAATAA AATAAAATA GAACCACCAT ATGANCCAGC AATCTCATTG GTGAGTATAT ATCCGAGGG

SEQ ID NO:1828: (Length of Sequence = 382 Nucleotides)

ATCTCTGACC ACCCCCTCCT CCCCATCCCA CCCTTTGGTA ACTCCCCCGC CCAGGNCATC GCCAGATAT ATTCTTCTCC  
TTGGGCAAGA AGTCTGTGTC ATGCAGGTCA AATCTGAAAG GNCATTTCT TTCTTTAATG AGTGTACAGG ATGGGGGATG  
TGGCTGATGA TATAAGGGGC CCTCCAATCA GACTTTCTAA TCTAACTGAA AAGNTAATTA CAATGTTGAT GCTAAAAAG  
AAGGTTCTGG CAAAATAGAA CTTCTGAAGC ATCATAAATC AGATGACTAA TATTTGTGAT CCCNTTTAA ATTTTCATGT  
GAAGAAGAAT AGGGGATGTA ACTGAAGRAA TGNACTAAAA GTTCTTCTAT GTATTGATAA CC

SEQ ID NO:1829: (Length of Sequence = 361 Nucleotides)

GGCGCGCGCT CTGGAGCTGG ATGTCCAGGC TGCGGCGCT GCTGGGCTC GGGCTGCTGG TTGGGGCTC GCGCTGCCG  
CGGATCAAAA GCCAGACCAT CGCTGTGTC TNGGGACCCA CCTGGTGGGG ACCNCAGCGG CTGAACCTGG GTGGCCGCTG  
GGACTCAAAG GTCATGGCGA GCACGGTGGT GAAGTACCTN AGCCAGGAGG AGGCCAGGC CGTGGACCAG GAGCTATTTA  
ACGAATACCA GTTCAGCGTG GACCAACTTA TGGAACTKGC CGGGCTGAGC TTGCTACAG CCATCGCCAA GGCATATCCC  
CCCACGTCCA TGTCCAGGAG CCCCCTACT GTCCTGGTCA T

SEQ ID NO:1830: (Length of Sequence = 180 Nucleotides)

AAGAACGTTG GCTGCCTGCA GGAGGCGCTG CAGCTGGCCA CTTCTTGGN CCANCTGGN CTCGGGGATG TAAAGAACTG  
AGTGGGGAAG GAGGAGGCTC CCACTGGATC CATCCGTCCA GCCAAGAGCT CTTATCTGC TACAAGAACA TTGAATCTT  
GGGACCTTTA AAGAGCCCCCT

SEQ ID NO:1831: (Length of Sequence = 335 Nucleotides)

AGATCTTCTA TATTCGACT ACTGATTCAA ATGCTAATCC TGGACGGCA TGGTGGCTCA CACCTGTAAT CCCAGCACTT  
TGGGAGGCTG AGGCTGGTGG NTCGCTGAG GTCGGAGTT TGAGATCAGC CTGGCCAACA TGGTGAAACC CTGTCTCTAC  
TAAAAATACA AAAATTTGCT GGGCGTGGTG ACATGCGCTT GAATCCAG CTACTCGGA GGTGAGGCA GGACAATCAC  
TTGAACCGG GAGGCAGAGG TTGAGTGAG TTATTCACCT ACTCACTCC AGCTGGGTG ACAAGAGGCTTCTTCTT  
CCCCACCAA AAGCG



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SEQ ID NO:1832: (Length of Sequence = 337 Nucleotides)

GTATTGGAG ATGGGACCTT TGGAAATGCT TTGATTAGGA AGAAGGAGCT TTCATGAACG GGATTAGTGC CCTTATAAAA  
 GAGGACGCG AGAGCTCTCT CACACCTTCC ACTGTCTGAG GNCACAGGGA GAAGGCCCTG TCTATGAACC AGGNAATGAT  
 CCCCACCCAG AACACCTTGA TCTTGGACTN CCCAGATGCT CCANATCTNT GAGAAGCAAA TTTCTGTGCT TTATAGCTA  
 TCCAATGTAT GGAATTTTNG TACAGCAGCC CCAACAGACT AAGNIATTAA TAAAATAAAG ATGTAAGATC TCTGTGAAA  
 ATGCACAAAT AATATCT

SEQ ID NO:1833: (Length of Sequence = 244 Nucleotides)

TCTCTCATTG TAAGCACAAA TTGTTCCGTG TCTGGTTATT AAAATCGCTT TGGGTCTATA ACAGCCACTC TTGTCCCCC  
 TTTTAATAGA AAATGTTCAT TCTAGCCTGG ATTTCTCCCC ACTGGAGGTG GAGGGTGGGA AGAGAAGGGA GTCAGCTCTG  
 ACAGCTTACA AACTGGAAG TTCTGTGCAT CTCCAGGGAT TCCAGAGTTG AAGATCTGGT TGTGTGAAGC TGGGCGCCCA  
 GTGC

SEQ ID NO:1834: (Length of Sequence = 322 Nucleotides)

TCCTGTACTA CACCTTTGCC AACATGGCCA TGTGAACCA CCTGGCAGG CCCCCGCTCT GCAGTACCTG TACTACCTGG  
 CCCAGATCGG CATGCCATG TCTCCGCTCA GCAACAACAG CCTCTTCTC AGCTATCACC GGAATCCGCT ACCGGAGTAC  
 CTGTCCCGCG GCTCATGGT CTCCCTGTCC ACTGATGATC CCTTGCACTT CCACTTNACC AAGGAGCCGC TGATGGAGGA  
 GTACAGCAAT GCCACCCAGG TGTGGAAGCT TCAGCTCTCG CGATATGTGT GAGCTGGCCC GCAACAGNGT GCTCATGAGC  
 GG

SEQ ID NO:1835: (Length of Sequence = 178 Nucleotides)

ATGAAAGCAC AAAAGAAGTC TATCAAAATT ACAAAACTT AAAACCGAGT AAACAAAATC TCAGAAAGAA TGAAACAAT  
 TGGAAATAA CTTCAAGAAA AAAATGTAAA ATGGAACAA TACAAGANCA ATTTGTGCCC TCTGAAAAAC AGAGGTTAA  
 GTCAGAAATT TTTGTGNC

SEQ ID NO:1836: (Length of Sequence = 377 Nucleotides)

CGCTGGNAC CACCCAGC TAATTTTGT ACTGTTAGCA GAAACAGGT TTCATCAGT TGGCCAGGCT GGTCTCGAAC  
 TCTGACCTC AAGTCACCA CCTGCCCTGG CCTCCCAAAG TGCTGGGATT ACAGGCATGA GCCACTGTGC CCGGCCTTTA  
 TGCTGAGTTT TAAGGGCTGT ATGAGACACC AGGTGGTGGG AGGGAGCTGT TTTGAGAGCA GGAATTTTAG GATACTTAGG  
 AAATTAGAAA ATTAGAGAAG TCATAGGATC TTGGAACATA GGGAGAACCT TAGAGTCTCG TGGAGCAGAA CCCAGCATTT  
 GTATGTGGAG GAAACGGAGG GCCCAGAGAA GTGTGTACTT ATNCCGGGGT CAATCTT

SEQ ID NO:1837: (Length of Sequence = 388 Nucleotides)

GGAGAGACA AACCTCTTA CTGGCCTTGG GCCCATCCCT CTTTCTCCA CACTGCTACT TTTGAGTTAT CTCATTTTGC  
 TCCCAATAGT CAGCCTTGAC TTTTCTGGGC TTACCTGGGC ATCAGGGACC CATGTTGCAC ATTCACTTGT CCGGATTATG  
 TCTGCCTTAG AGCGTCTCCT AGGGCAGCCA GTCTGGAACA GTCAGTCACC TAGGGTCTCG GAGCTCTGCG AGTCTGCCAC  
 TOGCTNCTTC TGCTGATAA CAAATACTAT TCCTTTTATC CTGCAACTC GACCCAGAAA GAGGTGGCTG TCAATGTCCA  
 AGGCCCTCG GAAACGAAG ACTGGAAATN TGAAACCACT GGGCACAGG GGAATGGGTG GGTCTGAG

SEQ ID NO:1838: (Length of Sequence = 369 Nucleotides)

TCTCTTTATG CCAACAATTA ACTGGGAGCT AGGTAAATTT ATTTGGCTAG ATAAACTAC CAGCTAGATG GATTATTTG  
 GTGCCCTCAT ACAGAATGCT GTAGAAATG TAAAGAAGAG AAAGCTCCTT CCAGCTAGAA GCACATGGGA CTGCTCTAG

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GATGGAAACA AGTCCTGCTA TTTTCACAAT CCTAAGNGT TCTCCAGGCC TCTGGAGAAC AAAGTAAAGT TGTAAGATCC  
 CCAAAGACAC GGAAATCCTT GGACGAACAG ATTAGAAATA ACTACAAAA ACAAGTTTTT TACTTTCGAA AAGGGTACTG  
 CACTGAAACC AAGTTGGACT TTTGGTCCAC CCCAGGGCC CTCTTCAGG

SEQ ID NO:1839: (Length of Sequence = 359 Nucleotides)

CNNGTAGGGA AGAGGACTTT ATTGGGATGT TAGTAGGGAA ACATGAGAGG GTGAATTCCA GGGAAATAGAC ACTAGGACCA  
 AGGTGGCGGT CACCTTAAAG AGCCATAAAT AAACCTTAAA AATTAAGGTG AGGAGGTGCC ACGTGGGGAG GCTGCTGGGA  
 CTATCTGGGA ATTCTTAGGG ATGGAATTTT GGAATTGGAA AGGGGAAATA AGAATTTCCA GCCGTNTCAC AAAAGGGTGT  
 GAAATGATCA CTTCAAGACT CCTGCTGCC CTAGGCTGGG AGTTGGGGTT CTGGGGCTCC AGGAAGAGGG GAGGTCTGGG  
 CTGGCTTNA AGGGGTGAAG AGGGCCCGGT CAAGGTCGT

SEQ ID NO:1840: (Length of Sequence = 360 Nucleotides)

CCAATGAGCC CAGCCTGACA CATATGGACT GCTCGACAGG TCCACTGTCC CACGAGCAGA AGCTGTCACA AAGCTTGGAA  
 ATTGCCTTGG CATCCACCTT TGGCTCTATG CCTCCTTCA CGGCACGGCT GACCAGGGGA CAGCTCCAGC ACCTTGGCAC  
 AAGAGGGAGC AACACTTCCT GGAGGCCTGG CACCGGCTCG GAGCAGCCTG GGAGCATCCT GGGCCCCGAA TGTGCTCCT  
 GCAAAANAGT ATTTTNTCC TACTTCAAAA AGGAGCCGT GTACCAGCTG CCTGCGGCC ACCTCCTGTG CCGNCCCTGC  
 CTGGGTNAGA AGCAACGGTC CCGCCCATG ACGTGCACAG

SEQ ID NO:1841: (Length of Sequence = 332 Nucleotides)

GTGTGATTCC ATTTATATGA AATGTCCAGA ACAGGGAAAA CCTATTNAG ACAACAGAGA CACAAAGTCG ATCAGCAGTT  
 GCCAGGGGAG GAGGAAGACG GGAGGGGAAA TGATTGCTTC ACGGGTGAT GACAGAAATGT TCCAGAACGT GACAGAGGTG  
 GTGCCTACAC AACTTTCTGG ATGTACTAAA TGCCGCTGAT TGTTCACTTT CAAGTGATTG ATTTTITAGGT TATTTGAATT  
 TCATCTCAAT TAAAAAACC AAACACGCAA ACTGCTCCCG CCAGCTTCAG CCCGAGGCA GACGCGCAN CCGTGGGAGG  
 GATGCTGAGC CA

SEQ ID NO:1842: (Length of Sequence = 246 Nucleotides)

GCTGGTCAAG GCAGAGTTA CTGAAGTNN AGTTTCTCCTC TGACACACC GGGCATGACA CCTTCAAGTC TGNCCAGCAG  
 TGGGTCCAGA AAGTACCCTG TGTGCTTGG ACGCAGAGGC TACAGTTCTN ACTGTGTGGC ATGGGAGCCT TCANAGTGCC  
 CTCGGGAGCT GCCCCTGGTC TTGTCTGNA AAGGTGACTG GGAGGNTAGA AAAAGCAGCG GGCTGGCATT GTTTCGGGGG  
 TGGGGT

SEQ ID NO:1843: (Length of Sequence = 313 Nucleotides)

ATTTATTGCA AACAAATG AGGTAAAAGA AGCTGACCCA GAACCCACGC CCGTCCAGGC TGGGGAAGTC TCTACTCGCC  
 CCACACCAGG CCCGAGCAC CGCGGGCCCG AAGCAGCCCC CAGAGGACAG ACGGGCCCTG CGCACTGAGG TAGCTGCATC  
 TTAAGCCCC ATGAGTACAA CTGCCCAGGG CTGCCCAAT CCCAGAGGGG AGGAGGAGAG AGAGGCAGGC AGGGGGAGCC  
 CCGGCTTCAG GTGGGGCACA CCCANACCC TCAACAAACC TTCCAGCCTC TTCGGGCTGG GGCATTCTCT GCC

SEQ ID NO:1844: (Length of Sequence = 274 Nucleotides)

CTTCGCTTCT NAAAACCAA CTCAGCCCG TGCCAGTCGG GACTTGGTCG CCCGNCCTG CCAGAATGCT CCACTGCCAG  
 CCGGCCCCC TGCTCGTTT TCCTTCTGT TTAGTGGCGA CACAGGCACC CAGCTTGGG GTGGTCTGA GGTTCQAGG  
 GGTGCCAGGA GCCACTGGA CAGGGTGAGG CTCCAGACG CTCCTCGAGG TGCCAGCTC TCCAGGGAGC TTCTGNCOA  
 AGGNCGTCTG AGGGATCTGC TCCTTAACCN CCA

SEQ ID NO:1845: (Length of Sequence = 441 Nucleotides)

GGGGAGGGGC GCACACACGA AGGGAGGTGT CAGCCGGGAC CGGAAATCCA ACAOGGCAAA GGAAAAAAA CACAACCCGT  
TTCCCAAAGG GAGGAGCAGC AGGAGACGAT GAAGAGAAGG AACAGAACTC TCTGGGCAAT TCTGATGTAC ACCCAGGTAC  
AGTGGGGATC TCTTCACTTG ATGCCCCAAA AAAGGGATAA ACAAAACAAA AACGTGAGCA GCCAGCTTCA TTCTCTTCTC  
TGCTTTGTCT CTGOCAGTG ACTTTGGGTT TTGTGTGAA GCTCTCTTAA TTCTTTGACC TTGAAGTTCC TCAACATCTA  
TCCAGTAGC CTCAGTTTCC ACTTTGCTTC AACTAACATC TTGGACTTTT TTCAGTCTTG AACAGGCTA AACCTTTGAG  
ATCTTGAACCT CGGACTTCAG CCTACTTAGC TTGATACTAC C

SEQ ID NO:1846: (Length of Sequence = 255 Nucleotides)

ATGAATTCAT TGIGTATTTA TTATTCACAG TTAATCACTA CCTACCAAAT GCTATCCGCA GAGTTAAAGG ATTAAGTACA  
TAGGTCTTTA TTTAAACACT GATTTTTTTT TTTAAATATA TACACACAAA ACTTAGTTCA GCAAGGCTTC ATGATATACA  
CCAATTCCAA AATAAAACAA TCAAATGGTC CNGNGTAGA ATGCCAGATT CCTTTTATCA TCTGOGAGGA AAAGAGAAGC  
AGGATGAGGA AGAGT

SEQ ID NO:1847: (Length of Sequence = 311 Nucleotides)

CAGGGCACAC GCAGGACCAC TGTTGATTAG AAACCCAC: JTCACCTCG CAACATTCTT CCCACATCCA CATCCACGAC  
GGAGCCAAAT CTCATTGTIN ACCCTCAGTC ACCACCCC: TATGGAGC CACTGGTTAC GNCATGGATG ACAGGTGTCA  
TGACAGGGA GAGAATTINT CCCCGGATAC CCTTGAGG: TGGNCCAC CCCAGGCTA GGGTGGGAGG ATTTAGAGCA  
GTGCAAGAAA CCAAGGAGGA TGGAGCATCC AAAGGAAG: AGGCAGGC TNGGGGATTG AGGGCAGGAA GGGCT

SEQ ID NO:1848: (Length of Sequence = 311 Nucleotides)

CCACTGGCCT ACATTATAGA AGTGTGTAT GCGGACCCCTG CCATTGTTCAT CATGGACGCA GGCCATGACC ATCATCACCA  
CCCATTTINT TGTCTGAAGA GAATCCAACT GCTACCCAAC CATCTGTGTC TGCACTCAGC TCAAATTCTA CATCAGCCCC  
TATCATCCGG TAGCTGAGGA AATAGTCACA GGCTCTGCA TTACAGCCCTG GTTTGCCATA TCTAAAGCAT CCCTTAGTTT  
TTCCACAGTC GTCCACTTTG ATTTTGGCAA ATGNTCCAC AGGAGAAGCA GCAGGGCTNN GTGTGGGTG T

SEQ ID NO:1849: (Length of Sequence = 318 Nucleotides)

GTGAGTCCC CAAGAGGGGC CTCAGTCAG AATGTGATG ACCAGTGGGC ACAGGTGGAG TGAGTGCTTG ATGCCCATGG  
TGAAAGCAGG GATGTGGGGC TTGTGCACAG TGANCTGCTG GACCTGCTGG GAGCCGGGGC CAGGCCGTGG CGTGAGGTCC  
AGAGGGTAGG CGAAGGCTTG GCCATGCTGT AAGTAGGGCT GCGTTCTTNA TAGATGGATG GCTCAGGTGG GCGTACGTG  
GTAGGTCCAG GGCCTCTGC CACATCTCC TTGTAGANCC AGTTCTTGTG CCTGGAGGCC AGACTNTAGC AGGGAGCA

SEQ ID NO:1850: (Length of Sequence = 406 Nucleotides)

GGAAGCCACT GATTTTCCCT CCAATATGAT GATTTACTTT AAAAATGAAC CCAGAGGGAC GGGCATGGTG GCTTATGCCT  
CTAATCCAG CACTTCAGGA GGCTGAGGCA GGCAGATCAC CTGAGGTGAG GAGTTGAGA CCAGCCTGGC CAATATGGTG  
AAAGCCTGT NTCTACTGAA AATATAAAAA TTAGCCGGGT GTGGTGGTGT GCACTGTAG TCCAGCTAC TCAGGAGGCT  
GAGGCAGGAG ACTCACTNAA CCTCTGTTGT GGAGGTGCA ATGAGCCGAG ATTCACCAC TGACTINCAGC TTTGCAACA  
GAGCAAGAC TNCGTCTTCA AAAAAAATA ANAAGGGAAA AAAAACCCNG NAAAAGCTTT TTTATTGTTA AAAACAAGTG  
GGTAC

SEQ ID NO:1851: (Length of Sequence = 328 Nucleotides)

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CTGAGGGGCA TTTTATTATTA TAAATTTAAT ATGGTTGATT AATGAAAAAT GACAATGAAG TACCAAGAAA ATGTTTGTCA  
ATATAAAAAT TTTAGCAGCA TTTCCATAGT TTCAGGCTCC AACATTAGTC GTACTTCCTC CCTCCCGCTA TCAAAAAAAG  
AAGAGACTCC AATGGGATGG AGTAGAGCCT GGGGGTGTCC AGCTTTGTGT GGGCCTCAGA GAAATACTCC ATCCAGCATC  
CAGGATTCTC CCTCCCTCTC ATCCCTGAAG TGCTAGAATG TCAAAGCACA GAAAAAGCCT CCTTTGTGCT GACATTGGAG  
ACAAGGAT

SEQ ID NO:1852: (Length of Sequence = 174 Nucleotides)

GGGCAGGACG GCTCTNGGCC CTTCCTGGCT GACTTCAACG GCTTCTCCCA CCTGGAGCTG AGAGGCCTGC ACACCTTTGC  
ACGGGACCTG GGGGAGAAGA TGGNGCTGGA GGTTCGTGTT CCTGGCAGCA GGCCCCAGCG GCCTNCTGCT CTTACNAACG  
GAGCAGTAAG GACG

SEQ ID NO:1853: (Length of Sequence = 252 Nucleotides)

GAGCCATGCA CACACACGGC CGCATAGTCA CACACGCATA TCTACATGTC CCCCCACAT ATACACACAC ACATATACAT  
GGACCCATGC ACACACACAG CTGGATATTC ACACACACTT GCATATCCAC TCCATATACA TAGACACGCA CAGACACAGC  
TGCATGTTCA CACACGNGGA CGTGACACG GACACAGACA TGCATGCATA TGCGCACAGG TGTGTACAGC CTCAGTGGTG  
GGGGTTGGCT GT

SEQ ID NO:1854: (Length of Sequence = 288 Nucleotides)

GGAAGGAGGG CTAACAATG GTCTGCAGCT CAGTTACTCC TCATCCTCGC CTGGGCCGGG CCAGCATCCA CTCCCCTTCC  
TGTAAGCAT TTGGATTTCC TTGGGGAAAC AGCCCTGCCC TCTGTCTGTA TCCATGTGTT TTGAGATCTC ACAGTAGCAA  
GTGACTCATG TTGGTTCACT GATTCCAGA GGCTGATTCA AGGATGTCCC CAGCTAGACC CAGGATGGTG GACTCCAGAT  
TGGGCACTG GGCAGTTTCA CATCCTCAAG GCTTGGCCAT CATCGGGG

SEQ ID NO:1855: (Length of Sequence = 293 Nucleotides)

AAATGCTTG TTGATATTTT AGTTATTAAT TCATATTAAC TTGGGCTGAA ACTTTTAAAT TCTATTGIGA ATAGTCAAGT  
AAAATTTAGA TTGTATACATT CTGGGTAGT ATTAGATGT TTTTAAGATT GTTTTAAACA AGATGTTTTT AAGATGAGTT  
TTAAATAGTT CTCTTAACAC AAATAAAGCT TAATATGAGT ATTTGAAGGA AATTATCCCA AACCATTCCA GTTCTGGCT  
GTGAAAGGCT TTTCCAGGGC TAATAAGTTT TCCACTTCAG CCGTAAGTAG GTG

SEQ ID NO:1856: (Length of Sequence = 308 Nucleotides)

ATCTTAGCAG AATCTTGAAA AGCCCAGAGA TCCAAAGAGC CCTTCGAGCA CCACGCAAGA AGATCCATCG CAGAGTCTTA  
AAGAAGAACC CACTGAAAAA CTGAGAATC ATGTTGAAGC TAAACCCATA TGCAAAGACC ATGCGCCGGA ACACCATTTCT  
TOGCCAGGCC AGGAATCACA AGCTCCGGGT GGATAAGGCA GCTNCTGCAG CAGCGGGCAC TTACAAGCCA AATCAGATGA  
GAAGCGGCG GTTGCAAGCA AGAAGCCTGT GGTAGGTAAG AAAGGAAAGA AGGCTGCTGT TGGTGTTA

SEQ ID NO:1857: (Length of Sequence = 299 Nucleotides)

GGGGAAAGCT AATTGGCAAT AATCCTTGCG GGAAGGTCAG ACTCCTCTCT TACAGATCTA GGGAAGGCCT GGTAAGATGA  
TGGCTCTTTG GAAAATGCCA AGCTCCTTCA GATTCCATAC CCTCTGGGC CCTCAAGCAT AGGCAACGAA CTGTCTCTG  
GCTTCAAGNT TTCTCATIGA ATCAAAGCTC TCATGCATGG CCTGGATTG TAAACAATG CTGGCTGCCA GCAGTGGCAA  
GTTAGCTTC TGACCCACTT CTCTCCTCT TTAATCTG TGTATGAGG GGGATGAG

SEQ ID NO:1858: (Length of Sequence = 295 Nucleotides)

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TAAGACTTCC TGTTAGTAAA AGCTACCTCA TGAAAAGTAT TGATGTTAAT TGCCAACTT TAGACTAGCT TTGTTTACCG  
 TTTTCAGTTAT TCAATTTAGT CAGCACATGT TTGAGTGTCT TACTGCAGGT GAATAATCCA TGATTCTGCG CCCAGAGTAG  
 TTCATAAGAC TGGTAGGATA CATAGATTG TAAATAAATA ATTATAATTC TGGGCAGTAA GTGCTGCTAT AGAAGTCTCT  
 ATAAAGCAAT GTGCAACAC AAGAAAAGGA GCCGTTAATT CCTTATAGGG AAAGG

SEQ ID NO:1859: (Length of Sequence = 326 Nucleotides)

CTTTATTTAG TGCTGGGGCT TTGGAAGCAA ATGTACCTGA GTTGAATCT CAGGGATAAC CTTTGTACTG TGGCCCTGGG  
 TAAGTACTC ACTGTCTCTG AAACCTCAAG TTCTCATAA ATAACCTAAG ATGGACAATC ATAACCTCTCT CTTGGATTGA  
 GGTAGGAGAA TATGGTGGAG GCAGGGAACC GAAGGCCATT TCACTCCAAC TTCTAGAAC TAAATTAAAA GGAAAACCTT  
 AATTTTCCAT GCCTAAGTAA CAAAAGGACC AAAGGTACT CGTTTGCAA ACTCCACCT TTTCTGCATG GCAGATGGGA  
 AGTTGG

SEQ ID NO:1860: (Length of Sequence = 294 Nucleotides)

CCACCCCTAA AAGCACTGG CCCGCTACA GCAAACCAGG TCTGTCCATG CGGCTGCTGG AATCAAAAAA AGGCCTCTCC  
 TTCTTTGCGT TTGAGCACAG TGAGGAGTAC CAGCAGGCTC AGCACAAGTT CCTGGTGGCC GTGGAGTCTA TGGAGCCGAA  
 CAACATCGTG GTTCTGCTCC AGACGAGCCC TTACCAAGTT GACTCACTCC TGCAGCTCAG CGATGCTGCG CGCTTCAAG  
 AGGATCAGGA GATGGCTCGA GACCTGCTAG AGAGAGGCT GTACAGCATG GAAT

SEQ ID NO:1861: (Length of Sequence = 183 Nucleotides)

TGAAGACTCC TAATCTAGTG CCTOGAGAAA AGCAGGCAAC AGAGGCCTGA TGTCTGACAT TGAATCTTTG GAAGATTAAA  
 CTTCCTCACA GATTTTINATA ATNACTTTGG AAATNATGAC TGATGCCAG GCTGTTCCIT GGGTGGACAG TTTGTCTTTT  
 TTTTTTTTTT TTTTTTTT TTT

SEQ ID NO:1862: (Length of Sequence = 296 Nucleotides)

TTGGGCTTCT TAAAGTCTT CCCATCCCTC CTAAGGCTA AGATGATGCA TTAACACAG AGGATGCCCA ACAGTGGCTG  
 ATGGAATTAC CAAGTAAAT CTAAGAGGTA GAAAAATGTG GTAGTTTTTA AATTTTATTT TATTAGTATG CAGGTGGGAT  
 TCAGAGACGT AAGATCTTAG CCTTTATTTT CAACATCTCC CATGCAATGTC AACAAAGATT ATCAAACACA GGAAGTGAAT  
 AAAATACTAT GTAGACACTG ACCCTCTTTA TATAAAATGT GATTGATCAG GTCTGG

SEQ ID NO:1863: (Length of Sequence = 259 Nucleotides)

CAAAACAAAA AGGGGCTCAA ACCAACAGGA AGTCAGCCCC ACGCAAGCC GGACTACAAC TAACTCGTGC TCTCCACGCT  
 CAGGCGTGA AGCCAAGGCT GTGCCAGGCC TGGCCAGGCC AAGCAGGATG ACAGCAAACG CATCTGTAAC GINTAGCAAT  
 CAGGTCCCCCT GTAATGTGCT TGGAGAGTNT GGACAAGGGC CGAGATGACG AGCTATGAGC TGTGGAAGGG AATGGGGGAA  
 GCAGAAGGSC ACAAACAGA

SEQ ID NO:1864: (Length of Sequence = 290 Nucleotides)

ATCCTTACCA ACAATGCTTC CCAACTGCCT CAAAGCTCTC CTAAATGAGA ACATAGTTCT TTCTGAGCAA GGTCTGTGG  
 ACCATGAAGA ATGTACCAA GTCCTCCCTCA GAGTCAGGG GAGCTCAGCC AAAGCACAAG TGCAGTGCCC AGCTCCTCCC  
 ACTCTGCACC TGCTGCTCA NACTCCCCAC GCTGAGCCCA GGGCCCTACC CTCTGAAGGT GTTCCCATG TGATTCTGAC  
 ACACACACC CACAGAAC AGATGATCTA TGCATACG CATTATGCTA

SEQ ID NO:1865: (Length of Sequence = 236 Nucleotides)

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CATTTCGTGTT ACATTGAGAC TTCAGTCACC AACATCTGGT GGCAGAGATA CAGGTGTATG AAACATTTCT ATTTACCCAA  
 ATATGCCAGT TOCCAAATAG GATGACTGCA TTTAGTGTTA AACTGGCTTT TCTCATTAGA TACTCTAATT GAGGAATATT  
 TAGCTTCTTG AATAGAAACC ATCCAAATGA TGTTTTTTTT TTGATATGTC TGTAAGTATA AAAATCAGCA AATAAG

SEQ ID NO:1866: (Length of Sequence = 424 Nucleotides)

TACGGGAAGG CGGTGTTTGG AGGCTGGAGC CGTGGCAACG TCATTGAGAA AATGCTCACA GACCGGCGGT CTACAGACCT  
 TAATGAGAGC CGCCGTGCAG ACGTGCCTGC CTTCCCAAGC TCTGGCTTCA CTGACTTGCC AGAGATTGTN TCCCGGATTG  
 AGCCCCCAC GAGCTATGTC TCTNATGGCT GTGCTGACGG AGAGGAGTCA GATTGTCTGA CAGAGTATGA GGAGGACGCC  
 GGACCCGACT GCTCGAGGGA TGAAGGGGGG TNCCTGAGG GCGCAACCCA GCACTGCCTC CGAGATGGAG GAGGAGAAGT  
 CGATTCTCCG GCAACGACGC TGTCTGCCCC AGGAGCCGCC CGCTCAGCC ACAGATGCCT NAGGACCTCG ACAAGGGTCA  
 CCCCTCCTCC ACCCTGGACT GGCT

SEQ ID NO:1867: (Length of Sequence = 256 Nucleotides)

AAACAATTGA AATCCACAAG AAATTACTAA CAGCACGTGT TTACGTTTTA TCCTGAATCA TACATTTTAA CAATTCACAG  
 CTACAGGAAA TCTAGAACAA AATCAAATAT TCATCACGTT GGGTTGAAAA GTTGAAGAT TTTGCATCTT ATTGAAAAGA  
 ATTTTTCAAA AATGTTTCTG TACAAATGAA TGAATTGCA CCAGGCTGCC CATGGACACC AGGTGTGGCC GCTTCCCAAC  
 GGTCACCCAC CAGCTT

SEQ ID NO:1868: (Length of Sequence = 297 Nucleotides)

CAAGGTTTTT TTTTATTTGT AGCTATAGCT ACAACTTGGC AGCATGGGGG AGGGTGGGAA TGTCTCTGGAG GGTCTCCAG  
 CCTCCGCAA GCAGAGTACA AAGGCTGCTC GGGGGGCCG CCGAGGGGCG GGTGTCAGCA GTGNAAGCAG CAGCACTAAA  
 CCTGGTGCCC CCTCAGGTG GGGTGTCTGG AAGACGGTGG GCAATCCCTG CAGGATGGGC GAGGACCAGA CCCCAGGGCG  
 GGGATCCTGC ATCCCTAGAC CATGTTGGGT CCTGGGTGAN GGCACCTINGG NATGCTA

SEQ ID NO:1869: (Length of Sequence = 470 Nucleotides)

CAGACATCTG GAGCATGGGA CTGTCTCTGG TAGAGATGGC GGTGTTGGAGG TATCCCATCC CTCCTCCAGA TGCCAAGGAG  
 CTGGAGCTGA TGTGTTGGTG CCAGGTGGAA GGAGATGCGG CTGAGACCCC ACCCAGGCCA AGGACCCCCG GGAGGCCCTT  
 TAGCTCATAC GGAATGGACA GCGACCTCC CATGGCAATT TTTGAGTTGT TGGATTACAT AGTCAACGAG CCTCTCCAA  
 ACTGCCAGT GGAGTNTTCA NTCTGGAATT TCAAGATTTT NTGAATAAAT GCTTAATAAA AAACCCCGCG AGAGAGAGCA  
 GNTTTTNAAG CAACTCATGG TTCAATGCTT TTATCAAGGG GATCTNGATG CTGAGGAAGT NNGATTTTTT CAAGGTGCGN  
 TCTGCTNCAC CATNGGGCTT TAACCAGNCC CGNACAACC AACCATGNN TGTGNGNTT TAAGNTTTT

SEQ ID NO:1870: (Length of Sequence = 344 Nucleotides)

AGAGATTAGA TTTGTTAAAC ATCTAGGTTA AAATGGTTAA AAGGATTTTC ATACAATTTT AGGCACTATA CAGTTTGT  
 ACAACAGCAT TGGTACTTGG ATATGGGGAA AGATAAATCC GACATTTTAA TATCTTGATC AATTTGTGAC ATTCAAATA  
 ATTCCATTAA AGAAACATTA ATCAAACTT AAAGAGACAT ACCACTAAGT ATCCACACA GTATACTGAA AATAAATATA  
 GNAATAAAC CAGAAGTCTA CAGTCAACCA CAGTAGACAG ACTGGTGAAG NCCCAGCTTT TCATGGGCAG TNAAGGGCTC  
 TGGGCTAGAT TTGGGTGTCA ACTG

SEQ ID NO:1871: (Length of Sequence = 278 Nucleotides)

GGATTTATTTG TCATTCCTCC AAGGTCAGCA GGGGAAGGGG ACACCAGCCA CACTTCACCA CAGGCATAGG TGGCACTGAG  
 CCACCTGGCA CTATCTCCAC GTGCTCCACA CGGAGGGGTG CCTTCTCACT GGCAGCAGCT GCATTTCTCT GCTTCTGCCT

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CAGCTGCCTC TCGCCCTTG CACACACAGT CCTTGGCACA CTTCTCACAC TNCGCAGGCA GCAGGAGCAG CAGCTCTTCT  
TGCAGGAGGT GCATTTCAT CCTCGCACT TGCAGGAG

SEQ ID NO:1872: (Length of Sequence = 271 Nucleotides)

CTTGCCATCT TCACAGCCAG AAGCTTCCCT GCTTCATGCG CAGACCCCTG TGACTCCCTT TCCCTTATAA GGGCCCCCAT  
GATTACTCAG GGCCACCTC AACCATCCAC GGTTCATCTC CCACCACGAA ATCCTGAACT GAAGCACAGG CGCCGGGTCC  
CTTTTGCCAC GCAAGGTAACT ACTTTCCAC GTCTGGGGT TCCAAACCTG CACATCTCTG GGGGCTGTTA TINCACCCAC  
CGTCATCAGT GAGGCGCCTT NAGGAGGGG T

SEQ ID NO:1873: (Length of Sequence = 332 Nucleotides)

CAGGGTATAG TGCAGTGGCG CAATCTCGGC CCACCACAGT CTCGACCTCA TGGGCTCAAG TGATCTCTCC ACCTCAGCCT  
CCCAAGTAGC TGGGACTACA GGCATCTCTC ACCATGCCCA GCCAATTTT TGCAATTTTC ATAGAGAAGG GGCTTCACCA  
TGCTGCCAG ACTGGTCTCG AACTCTGGG CTCAGCCAT GGAATTGCCT TGGCTCCCA AAGTGTAGG ATCAGAGCCG  
CGAGCCCTG GACCCGCGCT ATAGTTTGTG TTTGCTTTG TTTTGTTTT TTGAGATGGA GTCTCACCCT GTCANCCAGA  
TGGGAGTGCA GC

SEQ ID NO:1874: (Length of Sequence = 317 Nucleotides)

CTCTCACCT CAACCTCCAG CCCACCTCCA GGCTGGGGAA GGGGCTGAGT CTTCCCTCC CATACATACC TCACCCGGCC  
CCCAGCCAC AGAGAGGCTG AGGGAGGGG TCTGGGTCT CTTCCATCCC TGTACCTGCT TCTTCCCTCT TCATTCCAC  
CTTCTAGATC TTTCCCCCA CCCAGCCAC CTCAGGCTG GGAAGGTGA GGAATTCTT CTTCCACAC CTTACCCAC  
CTCACCTGCA GCCTGTGCC TGGGCCAGGA GAGGCATGG TGAACAACCA GACCCACAAC CCCGACCCT GCAGGCT

SEQ ID NO:1875: (Length of Sequence = 185 Nucleotides)

GTGTTCCACC CACCTCGGCC TCCAAAGTG CTGGGATTC TGGCGTGAGC ACGCTGCGC TGGACAGTCT GCCCTAGAT  
GAGTGGCCA GCACGTTACA GCTACTGCT GCGCGACCC CAGCCCTGA TTCTACGCC GCTCGGCAGG GGGACGGCCA  
GGGAGAGGTC CAGCGCGCG GCAAG

SEQ ID NO:1876: (Length of Sequence = 214 Nucleotides)

CCTGGGGACA AATAGTTCAG CAAATTCTCA AGGGGAGAAA ATAAAGTACT TCCCTTCTGT TAAAAAAG TCAAGAGACA  
AATCTTTCT CCCCATTCT CACTAATAGT TATTGAAGGG GAAAAAACA AACCCACAA CTTTTTAAAC TAAAGATAAA  
AACAAATGAA AATGAATAAG ATCAAAGAA TGTCTTTTGT TACTCTGCT TATG

SEQ ID NO:1877: (Length of Sequence = 340 Nucleotides)

TTGAAGAAG AAGAAGTTGA ATTTATCAGT GTGCCGTGCC CAGAGTTTGC AGATAGTGAT CTGCCAACA TTGTTATGA  
CTTAACAAG AAACCTACAG CCTATTAGA TCTTAACCTG GNTAAGTGCT ATGTGATCCC TCTGAACACT TCCATTGTTA  
TGCCACCCAG AAACCTACTG GAGTTACTTA TTAACATCAA GGCTGGAACC TATTGGCTC AGTCTATCT GATTCATGAG  
CACATGGTTA TTACTGATCG CATTGAAAC ATTGATCACC TGGGTTCTT TATTATGA CTGTGTCATG ACAAGGAAAC  
TTACAAACTG CAACGGCAGG

SEQ ID NO:1878: (Length of Sequence = 326 Nucleotides)

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GAAAAACAAG GAAATAGGC AACAACTGC AATGGACACT TTCTCTACA GAACCTTTTC AACCTGAAT TGAATTGTTT  
 CCTATTCAAT TNCTAATAAA AAGTTACTTT GCAAGATATA AGGAAATACT GTCCCAAAGA TTTTCACTAG TCATTCAATC  
 CATTAAATAGG ATTTGAAAAG GCATCATAC ACAGGGTTGA AAATACTCTG GAATGAGACT GCTTTACAGT CAGAATGCCT  
 GAGTTTGTAG GCACTGTAC TTCTAAACAT CTCTAAGTTT CTATTINCTC ATCTAAAGGA GTAATATTAC TTTCTTAAA  
 AGGTG

SEQ ID NO:1879: (Length of Sequence = 222 Nucleotides)

GAAAGGGAGA GGTTCAGCG AGCCAAGATC GTGCCACTGC ACTCCACCT GGGTGACAGG GCAAGACTCC ATCTTAAAA  
 AGAAAACCCA GGAGTCTTTG GTTAATGTAG TGCAGGACTC TGAGCTCCCG GGAGGACCT TCCCTCCAG ATGAAGTGTG  
 ATGGACCAGC CCAAAGGAGG GGAGAGAGCA CTINGGCCAT AGTGGTGGT GATCTTTCTA AC

SEQ ID NO:1880: (Length of Sequence = 244 Nucleotides)

GACATGAATG GTATCTCCT GGGGTATGAG ATCCGCTACT GGAAAGCTGG GGACAAAGAA GCAGCTGGG ACCGAGTGAG  
 GACAGCAGG CTGGACACCA GTGCCGAGT CAGCGGCTG CATCCCAACA CCAAGTACCA TGTGACCGT AGGGCCTACA  
 ACCNGGCTGG CACTNGGCTT GCCAGCCTT CTGCCAACN CAGGACCAT TAAGCCCCCT CCGCGGCGAC CTCCTGGCA  
 ACAT

SEQ ID NO:1881: (Length of Sequence = 156 Nucleotides)

GTACAGGGGA GAGTTGAGCT GTGACAAAGT CAAACACAGG CCTTGGCCAC CCACAGGAGC TCTGCAGCTG GGGTGGTCTT  
 GAAAGTTGTC TCAGTGAAGG CAAGGTGCTG AGCTTATTAC CCCAGCAGTC ATTGTATTTA GGCTCCGTGT GGTACC

SEQ ID NO:1882: (Length of Sequence = 210 Nucleotides)

TTTTTTTGA AACGAAGTCT CAGTCTGTCA CCCAGGCTGG AGTGCAGTGG CAGGATCCCG GCTCACTGCA ACCTTGINT  
 CCCAGGCTCA AGCTAGTCTC CTGCTCAGC TGCCCGAGCA GACGGGACTA CAGGCACCCC CACCACGCCC GGCCAATCTC  
 CAAATGGTTC TTTTTTCCG GAGTAGTAAG TTACAATATG GGAGATTATT

SEQ ID NO:1883: (Length of Sequence = 214 Nucleotides)

GTGATGAATA CATCCAGTTT TCCAACCACA TTCCACCAGG TGGGTGTTTG GCTGTGGGAC GCATTATGTA ATCTTCGTTG  
 CCAGGAAATT TACCTTCTA ATTACATTTT GCAAATGTTT ATTTGAAGCC GCCTTCTTGG AGCTCACAGT AACTAGGAGG  
 TGGCTGCTGG AAGCCCCAGG GCACGTGGG AGGGACAGGG GAACGTCCA GACC

SEQ ID NO:1884: (Length of Sequence = 211 Nucleotides)

ATCTTTCGCT CTATGTGCA TCACCTGGAC ACTCTAGGTA ATACCCCTG TTGGGCAGGG GTGAGCTCCC AAGGCCTCAG  
 GCAACCCAGC TCCCATGACT TTGCTGGGCT CAGCCCAT AACTGTTCTC ACAGGATAGA GTTGTACACT GGTGCTTACA  
 GCTTCTCTGG GCCAGTGTG CATGCTGCCA GTGGCTGCAG CAGCAGCCCC A

SEQ ID NO:1885: (Length of Sequence = 212 Nucleotides)

ATTAGCTGAA TTGCGTGTG GCGTTTGGG TAGGCAAAGG AGACATCTG GAACTGGACA AGGCCCTCCA AGTGTAAAGG  
 AGTCAACAGA CCACTGGGTG GGCAGCGAGG GTTGGGTCC AGGTACTTAA ATATTTTCTC TGAGGAGCCC ACAGCCTTCT  
 GTACTCTGGG GTAGATGGAG AGCAGTACCT CCACAGCCTG GGTGAATGTC AT

SEQ ID NO:1886: (Length of Sequence = 208 Nucleotides)



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CATCCGCATA GTATTACAT CATGGGTATA GGCAAGINCT ACAAATCAGG NCTTINCCTT GGGGATGGAT GTTTGGAGCT  
AGTTTACCAG CACACCAGTG GGTAAAAGTG AACAAATACT TTTTGTATCC CACAGAATCT TAAAAAATAC TTTACTTCGA  
AAATGTCTCT ACTAAGTAAT CATATATATA TATATATNTG TATATATA

SEQ ID NO:1887: (Length of Sequence = 332 Nucleotides)

CTCGTTCAC T GCCGCCAAC TCCCATTOCA ACTTCCTTTT TACACTGGAT GTTCTATCA CATCTGAGG ACCACTAACC  
CACCAGCAAG TCTCCCCCTG ACACACATTC ACGTAGGTCC ATACCCCTCA GAGTCCTAAA GGGTTAATGA GAAGCCACCT  
CAGCTTTGGT GAATGGAGCC CCAGCCCCAA ATCCCCTCCC CTGCAAATA TGGGACAAGT AGGGAGAGTC TGATGGAGGC  
ACCAGGACAA CTACAACAAC CTCTTACCCC TCAGCTATAG ACACCTAGAT CAGGACAGAG GGATGCATAT GCOCTCTCCA  
CCTTAACACC AA

SEQ ID NO:1888: (Length of Sequence = 224 Nucleotides)

AAGAGCTGAT TGAGGCTGCC AAGAGGAACG ACTTCTGTAA GCTCCAGGAG CTGCACCGAG CTGGGGGOGA CCTCATGCAC  
CGAGACGAGC AGAGTGCAC GCTCCTGCAC CACGCAGTCA GCACTGGCAG CAAGGATGTG GTCGGCTACC TGCTGGACCA  
CGCCCCCCA GAGATCCTTG ATGCGGTGGA GGAAACGGG GAGACCTGTT TNCACCAAGC AGCG

SEQ ID NO:1889: (Length of Sequence = 261 Nucleotides)

CACCTTACTG AGTCACACCC AGCTGTAAAC ATGTCACCGT GAGANTCCCG CCCCCACCC CCAGGCCGCA CAGTCOGGA  
TGAAATGACA GGGGAGCGGG GAGGGTCGCC GGAGCGGGTG CCAAGCAAGG CAGGGCAGGC AAGTGCAGCA GCGCTGAGT  
TTCCGGGAGG AAGCCCGGAG GAGGTGGGGT GGGGCAGGAG CGNGGGCTGG GGACCCGGCC GAAGACCAGG GGGCCAGGA  
AGCCTCTTTT CGAAGGNC T

SEQ ID NO:1890: (Length of Sequence = 312 Nucleotides)

CTCGAGACT ACGAGACGGT GGTCAAGGTG AAGCCCCATG ACAAGGATGC CAAAATGAAA TACCAGGAGT GCAACAAGAT  
CGTGAAGCAG AAGGCTTTG AGCGGGCCAT CGCGGGGAC GAGCACAAGC GCTCCGTGGT GGACTCGCTG GACATCGAGA  
GCATGACCAT TGAGGATGAG TACAGCGGAC CCAAGCTTGA AGAOGGCAAA GTGACAATCA GTTTCATGAA GGAGCTCATG  
CAGTGGTACA AGGNCAGAA GAACTGCAC CGGAAATGTG CCTACCAGAC AGAGAAGATT ACAGTATGTG GG

SEQ ID NO:1891: (Length of Sequence = 298 Nucleotides)

CCTAAAGGCC AGGCAAGGCT GATTCTCCAC TTCCACATGA GACAGAGCTG ATTCTGCAGG GAAACGGCTG GGGAGGCTCC  
ACCTCTTTCC TCCOCACAAC CATTTACTGG GAAGTGTGT ATACTTGGCA GINTGGGAGG AAGGTACTTG GAAGACCCTG  
CCAGCCATCT CCCACCCAGA CTTCTTCTCA CCAGCACAGT CTTCAAGGCT TGGTGGGAAA GGTTGTGGG AGTGGAGAAA  
GACAAAGGSC CCTTCTTNA GAGAGGAGCT GCAGAGAGGG GCAAAGGGT TCCTAGCC

SEQ ID NO:1892: (Length of Sequence = 333 Nucleotides)

CTCAAGGTC ATCCAGTCCG TCGCTAATTA TGCAAGGGT GACCTGGACA TATCTTACAT CACATCCAGA ATTGCAGTGA  
TGTCATTCCC AGCAGAAGGT GTGGAGTCAG CGCTCAAAA CAACATCGAA GATTGCGGTT GTTCTGGAC TCCAAGCACC  
CAGGGCACTA TGCCGTCTAC AACCTGTCCC CGAGGACCTA CGGCCCTCC AGGTTCACA ACCGGGTCTC CGAGTGTGGC  
TGGGCAGCAC GCGGGGCCCC ACACCTGCAC ACCCTGTACA ACATCTGCAG GAACATGCAC GNTGGCTGC GGCAGGACCA  
CAAGAACGTC TTC

SEQ ID NO:1893: (Length of Sequence = 487 Nucleotides)

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CCAGATAGAG TTTCTGTTTT TNAGTTTTAC ACGTGCCACA TCAGGGAAAG TTAGGTTATG ATTAAGCAA GAGATGATAG  
 ATGAACAAAC AAAGAAACAA CAACAAAAG CCCATGCAAG AGGCAGGAAA AGAGGCTGAC TGGTTAAAGA ACAGGCCAGA  
 TTGGACAATA CTGATCAAGA GGGGTTTACA TTGTAAAGAA CAGTGCTTTA TTCCTCTACT GACTAGAACT AAAGGGATTT  
 TGGCCGGGTA CGGTGGCTCA CACCTGTAAT CCCAACACTC TGGGAAGCCA AGGTGGGCGG GTCACGAGGT CAGGAGTTG  
 AGACCAGCCT NACCAACATG GGTGAAACCC CATCTCTACC CAAATACAA AAACCTTTNC CGAGCGTGGG CCCGGCGTTG  
 GTTGGCTCAT ACATTNAIN CCCCNCITT NGGGGGCCCA NCGGGCGGT TCACCTTAGG GTCAAAGGT NCGGGNCCT  
 TCTTGGC

SEQ ID NO:1894: (Length of Sequence = 283 Nucleotides)

GGTGGTGAAG TGGGCTCTGG AGAAGCTGA GCTGACCAAG TAGCAGACA AGCGGCTGG CACCTACAGC GGCGCAACA  
 AGCGGAAGCT CTCACGGCC ATCGCCCTCA TTGGGTACCC AGCCTTCATC TTCCTGGACG AGCCACCAC AGGCATGGAC  
 CCAAGGCCC GCGCTTCCT CTGGAACCTC ATCTCGACC TCATCAAGAC AGGCGTTCA GTGTGCTGA CATCACAG  
 CATGGAGGAG TCGAGGCGC TGTGCACGC GCTGGCCATC ATG

SEQ ID NO:1895: (Length of Sequence = 234 Nucleotides)

ATGTCCATTA GCCTCATTG TCATCTGAGG GAGCTGGTGA GAACAGCCTT GCGTGAAGG CATCCCTGGT AGAAGTCGGG  
 GGAGATAGAT AGTCACAGTT CCCAGTTGG TGGAAATNGG ATNGGAGTAG GGAGAGGCTN GAACAGACCC TTCCCCATT  
 ACCTGNGAA TTTTCTCTC CACTGCCCT AAACACTTTA TTCCATCAC AGGGGAGAAA TNCCTGAG AAGG

SEQ ID NO:1896: (Length of Sequence = 285 Nucleotides)

CTTAAAGTG TAATAATATG ATTTTTTAAA AGAAATTTAT TACTGTGTC AAAGTCTTT TTAAACCACT TTAGATTCA  
 AGAAAAATA AATGGAAATC ATCGAAATTT CATTTCACAT TAATGGTCTA AAAATAAACC AAAGGACATT ATGTGTGCAT  
 GTGTGTATA GTGCACACAG AAATATATAT NCATATGNG ACTATATACA TGTGTGTATA TATGTGTATA TATACATNCA  
 CTGTGTATAA TGTATATACA CATATACCTA TAATGTGTGT ATGTG

SEQ ID NO:1897: (Length of Sequence = 288 Nucleotides)

GCAGGTTTAT GTTTTTTAT ATGTATTNA ACTGACTTAT TTGTGTATCC CACTAGAACA ATACATTAC AATATACTTG  
 CAGAACTGTG CTGGSGSAT CATGGGAGCA GAGAACTGT CAGTGAATA GTTGTGAAG AAAGGAGTAA AAWCTCCCC  
 AAACCTAAA GGCATCCTT TGTAGTGTG TGTCCAYAG GTATGGCTGC TGAGCACCAG GGGCTGCTCA CCATGTCCTC  
 AAGAAGCAGA GTCANGGAGG CAGACAGCAG GGTATTATTA GGTGCACA

SEQ ID NO:1898: (Length of Sequence = 398 Nucleotides)

CAGAAGTAAA AGATTTTTAT TGTCTATAG ACACCTCTGA AAAGAGATCT AATTGAGAAA ATATACAAAG CATTTAAGAG  
 TTTTCATCCC AGAGACTGAC TGAAGGCGTT ACAGCCCTCC TCTCCAAGGC TCAGGGCTGA GAACGGTTAG CATATCGAAT  
 GATCAGTAAA AACATGCAA AGTGAGAAGG AAAGGAGAAA AGGTGCATT CCCTAAGCTG AGGGGGATGG AATTTAGAA  
 CAGAGGAGGC AGGTGGACA AGTACCAGGT GGCTCTCCCT TTCCCTCTGT GTTATCTTC AAAACAGTTC CAAGCTTTGA  
 GAAAGCAATG AGTCCACCT ACTCAGCAGA CCCACGGTTC GTCCCCCTGG ACGTGACTTA GCACTGACCT TGCTGCC

SEQ ID NO:1899: (Length of Sequence = 227 Nucleotides)

CATGGGGACC CGGTTTTATT TTATTAGGAA GGAAACAACC AAGCACCCCA TGTTCCTGCC CGGACTCCC GGGGGGAACA  
 TGCCAAAMAG CCGGGGATCG AACCAGCCC ACCTGTCTGT GRGGKCCCTT CCTTCTCAGG CCACAGAAAT AAACCCGTGT

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ACTTTTATT GTTAGCACAA CATTACCAGA AAACGKTAAC GGCAGCCAAG CAGGACAGAC AGTTAAG

SEQ ID NO:1900: (Length of Sequence = 405 Nucleotides)

GGGATGCACT GGGTTTCACA TCAAGTTCTT GAGAGGWTCC CGAACGACTT CTCTGCCCCA GGGGAGTCCG AGCCACAGTT  
TTCTGATCAA CTGATGATTC TRACCCGCTT CTTTCTCTCT GGGGGGTAAAG ACACITGTTG TTGAGCTCTG GGGATGATGG  
AGAAOGACTC CTGGGCTAG GAGTCTGAGG CAAAGCTTTC GGTCTGCGG AAGAATCACA TTCGCTTCTC CCTCTAGATG  
GGTCTTAGG TATATCTTTC ATTCCAGGAG AGGACCCAGA CAGGCTGTGC CTCGAGGGAG TCCCAGACCC ATCTCTAAGT  
CCTGGAGAAG ACCCAGACCT GCTTCTCCTT GATGGAGTTC TGGTAAACCA TCTTTCATTT CAGGAGAAGA TGCAGACTAC  
TTCTT

SEQ ID NO:1901: (Length of Sequence = 244 Nucleotides)

ATRATTCATA TGCTAGTTTA TTTATCTTAT TATTGAGAGA TAATTTTCATG ATGACAGTTA TCAATAATCA ATTACAATAT  
CAAGAAATTC AAAGAACAAA ATCTTGACAGA GACTATGCTT TTGTATTGGG ATTAAAGGAG TATGTGATCT CATTTCACA  
TACCAAGCTG AGAGGCCATT TAGACTATCT CTTTGCTAAT TTTTGCTTAC TGCTGTAGGG AAGAAGATTT CCAATGAMCT  
TTAG

SEQ ID NO:1902: (Length of Sequence = 329 Nucleotides)

TAAAAATAAA AAAATAAATA AAATTTTAAA AATAATAAAA ATTCACTATA TACACATATA AAGAAATAAA AAGAAGTCTC  
AGTTGCAGCT ATTTGTCAAA ATTAATATCC ATTTCTWTTW ATATACGGTG AATATTGGGC AATATAGAT CTGGATTTTA  
AACCCTTAA TGAAGCGCA ACACCAGTG TTTAAGGTG TTGGCATCT TOGCTGATTT GGCTGTCC AATGTTTACA  
TTATTTAATC TTGCAAAAT GGTCTGATG CACTTGGGAT GTGAAATGCT GTCCGTTTT ATTTTTTTAA TGTGTGTATC  
CTTGGGTGT

SEQ ID NO:1903: (Length of Sequence = 421 Nucleotides)

ATTTTATATT CCACAGTCAG GTGGGTCTGC GATASTCAAT TAATGTTAAA CGCCATCAGG GGCTCTCTCT CCGTTTCTG  
CCAGGGGCTT TTCTGTCTT CTCTTGGTC ATCATCATCA TGTCTTCTCT CTCTCTGTC GGCAGATCTT CTCTGGTGGG  
GGCTGGCTGC TGGCTCCGAG GGGGCATCG CAGTCOGTCT GGTGTCTCC TCTGTCAGGC TGGGCAGCTG GCCACCACTT  
CTCCGACTCG ACCCTCCAA CAAGCATGCG AGGGCACTGT CCTGGGGGT ACAGACCGTG GTCCACATT CGCTACCACT  
CTGTCCACG NCATCCAGGG TACACGAGCT GGTGTAGGC CGTGTGTCT TGGGCTCGA GGCTCTTCT GCTGGTGCTC  
TTGGACGGGC GGGTAAATTC T

SEQ ID NO:1904: (Length of Sequence = 423 Nucleotides)

GTCTGTGGC CTGTCTGAA GTGAOGTGC AGCCAGGCTG CTCCCTGCC AGCAACCCG AAGCCATTGT GCTGGACGTC  
GACTACAAGT NTGGGACCC GATGCAGAGT GCTGCAAAG CCCCATATCT GGCCAAGTTC AAGGTGAAGC GATGTGGAGT  
TAGTGAACCT GAAAAAGAAG GTCTGCGTG CGCTCAGAC TCTGAGGATG AGTGCAGCAC GCAGGAGGCC GACGGCAGAA  
GATCTCTGG CAGGCAGCCA TCTTCAAACT GGGAGACGAC TTCCGGCAGG ACATGCTGGC CCTGCAGATC ATCGACCTCT  
TTCAAGAACA TCTTCCAGCT TGTGGGCTG GACCTCTTGT TTTTCCCTA CCGGTGGTG GCCACTGCC CTGGGTTCGG  
GGTGATCGAG TGCATCCCG ACT

SEQ ID NO:1905: (Length of Sequence = 370 Nucleotides)

CAGAACCAGA ACATTTTAC TCTTTGGCT CTGGGAAGG CAGGCAGAG TGCAAGGTGT CCACAGGAGG GTTAGCAGA  
GAGGAGCTAC AGGGGGCTGC AGTCTAGTA CCTGTGTTGG GAGGACTGAG GGATGGTGAG TTTGTTCTCC GGAGGGGCT

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CCAGTCCTGG TGCCAGTTC TNACANCTGC CCTCCTGAG TTCACACTGG AGTCCTTGCA GTCTGAAAC CACAAGGCCT  
 NOCTGAACCC TGGGTCAGGA GAGAAANACT TGGGGAGGGG AAAGGACGGC GTGGGCTACC CATKACGGCT CTGAGTTCTT  
 CCTGGGGCTT GTGTCTTTTC CTGGGCAGAA GAGGGCACAG CCAAAGGCAA

SEQ ID NO:1906: (Length of Sequence = 415 Nucleotides)

GTACACCTT CATTCAGTGA GGAAGAAATG CTTTCACTCT GGAATTCAC AGCATCCCAA TCTGACGTTG TACCOGTGTG  
 ACACTGTTTG TGAGCCCCAA GTTTCAACGA GCTCTTGCAA GTAAACGGAC ATTGTCACA TTTGTAGACA GCTGTCTTTC  
 CAGATAAGTG GATGTTTTCT ATGTGACGAG AGATGCTACG TCGATGCATG GTGAGGAAAG GACAAAAGGG GCACTGGAAC  
 CTATTATGA ATCTNCTAAA TGGAATCCCC TTGGTCTCCA ATAATTGTT GCCATCTGAG CCCATCAGCT GCTCTGCAGA  
 CAGGCCTGAT GTCTGGTGAT CCACAGCACT TAAACCATTG TCACITGTCT ATTTCAITTA ACTCTTCATC AGAACTAGAG  
 TCATTAGCAT GCTGT

SEQ ID NO:1907: (Length of Sequence = 214 Nucleotides)

TGAAATCCTG TACGTGTCAA CTTTGAAATG TATGTGTGTT GGTGGGGTGG TGGTGATGTG ATACGGTTTG GATGTCTGTC  
 CCTCCAAAT CTCATGTGA ACTATAATCC CCAATGTTC AGTTGACGTG GTGTTTGGTT CCATGGCGGG GTACCCTAGG  
 GATTCATCTG TTTCTTTCAC TTCCCTTTC ATCTGAGATC CTGCTGGAAA CCAC

SEQ ID NO:1908: (Length of Sequence = 410 Nucleotides)

CAGGAGAGCT GGGCACATGT CCCAAGCCTG TNAGTGGCCC TCCCTGGTGC ACTGTCCCCG AAACCCCTGC TTGGGAAGGG  
 AAGCTGTCCG GTGGGCTAGG ACTGACCTTT GTGGTGTTTT TTGGGGTGGT GGCTGGAAAC AGCCCTCTCC CACGTGGCAG  
 AGGCTCAGCC TGGCTCCCTT CCCTGGAGCG GCAGGGCGTG ACGGCCACAG GGTCTGCCCC CTGCACGTTT TGCCAAGGTG  
 GTGGTGGCGG GCGGGTAGGG GTGTGGGGGC CGTCTTCCTC CTGINTCTTT CCTTTCACCC TAGCCTGACT GGAAGCAGAA  
 AATGACCAA TCAGTATTTT TTTTAATGAA ATATTATTGC TGGAGGCGTN CCAGGCAAAG CCTGGCTGTA GTAGCGAGTG  
 ATCTGCGGGG

SEQ ID NO:1909: (Length of Sequence = 339 Nucleotides)

AAAATTAAAT CCAAATTTTA TTAAGGATTT CAGGTACAT ACTTCAAATT TCTAGAATGG AATGGAATCA TTTTGGAAT  
 GGAAAATGG CATAAACT GACGTCCCTT AAAACTTCAA TTTTATAAAG AAAATTCTTC TGCAAACCAC ATCCCTTTA  
 TGTAACAAGA CTAGGTATTA TCTACACCTT CACTTTGGCA ATAGCTATTT CCTAAAGAAT GAAAAGATG ATTTTNTTAC  
 TTCAGTTTAT TAAAATGGG ATTCTATCTT TGAAGTTCAG AAAAAGCTGC ATTTGATGA ACTATGGGTT AAAAAAAAAA  
 GCACATAGTG TCTAATCAA

SEQ ID NO:1910: (Length of Sequence = 439 Nucleotides)

GGCCAGGGA GCACCAATCA CAGCAGGGG TCTGGCCAG GTGTGGGAG CCCAGGCCTC CATTTGCTAA TGATTAATAC  
 ACTGTTTGGG CTGGCCAGTT TTTATGTCAT GCAGCTTGAC GATTGAGCAC AGTCAGGCTT TTGTATTAAA AATGAAAAAT  
 GAAAAACAA ATTCAAAACC TATTCAAATG GGTTCAGTT CAATTGTGTT AGTATAAATT GTCATAGCTG GTTTACTGAA  
 AACAAACACA TTTAAATG GTTTACCTCA GGATGACGTG CAGAAAAATG GGTGAAGGAT AAACCGTTGA GACGTGGCCC  
 CACTGGTAGG ATGGTCTCT TGTACTTCGT GTGCTCCGAC CCATGGTGAC GATGACACAC CCTGGTGGGC ATGCCCGTGT  
 ATGTGTTT AGCGTTGTCT GCATTGTCTA GGAGTGAAC

SEQ ID NO:1911: (Length of Sequence = 342 Nucleotides)

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AATGCACCCA TTTGGCTGCC AAGAGCTTCT CACTGCCTTG CTAGCAGCCT GCCACTGTNC CCTGGCAAAT TGAAACCACC  
 CACGCAAACA CTCAAACCC CAATCTCCTT GCTAATAAGA TACAACCACT TAACACCGTG AAAAATGCAC ATCTCCAGCC  
 TTCATTTCOA AAAAGAGCTC TGTACTAAAT GCAATATGCT TTAAAGGGG GTTTTACAGG GACCAATCTC AATGCAAAGA  
 CCAGTACCAG ATGTCTGAGT TTTGGTTACA GGTTTATAAT TAGACACAAA ATTCACCTCA CACTGGAGTT TTAATTTCOA  
 GCTGGAGTTA GCATTAGTTC TA

SEQ ID NO:1912: (Length of Sequence = 380 Nucleotides)

TCATGCTTTT AATACAACT TAAAAAATC TGGAACAATA GAACTGTAC AGATTGATC AATCTTTTTG TTTTGTTTTT  
 AAATAAAT CTCTAAACAC ACCAATGTCC CATTCCAAA TATTGCACAA CATTCTGAAT ACAAACCCCT TGATTGTATT  
 CCTCCINCAC TAAAGAAAAA AGTTCATGAC CCGTCTCCC GGGCTCCTCT CCAGGCTTGC CTCAATGCCC CCTTCCCATC  
 CCTAGGGAGA AAATAAGAGA ATCTATAACT CACTGCATTG AGAAAAACAC ATCATTCTGG ACTAACAGTT TTCCATTCTT  
 CAGANGNTA ATCCACCTTT TGGATTGTG CTTGGGAAA GAGGGGTAGA TAGAGGGATG

SEQ ID NO:1913: (Length of Sequence = 361 Nucleotides)

GAGACAGAGT TTTGCTCGTT GCCCAGGCTG GAGTGCAATG GCGTGATCTC AGCTCACCAC AACCTCCACC TCCGGGGTTC  
 AAGCCATTCT CCGCCTCCG ACTCCGAGT AGCTGAGATT ACAGGCATGT GCCACCACG CCAGCTAAGG CTTTGTATTT  
 TNAGCAGAGA TGGGGTTTCA CCATGTTGGC CCGGCTGGT TCAAACTCCT GACATCACAT GATCCCCCG NCTCAGCCTC  
 CCCAAGTGCT GGGATTACCG GTGTGAGCCA CTGCCCTGGG CTCCTCAGTA CATTTTTAGG GGGACGATCA ATGAGGATTC  
 TCTCTCTGA GTTACTGCAT GTGTACAGT TTATAATCCT T

SEQ ID NO:1914: (Length of Sequence = 409 Nucleotides)

GGGGGCCCTA CAACTAGGTA TGGTGGATAT TGCCCGACAG ACGGTTGAAT TTCTCTACGA AGAGAATGGT GGCATCCCAA  
 GAGACCTTTA TCTTCCACC ATTGAAGACA TTAAAGACGA AGCAAACAAG TTCACAATTG ATAAAGTTCC AAAAGGTCTC  
 ACAGTAGTAA CCGCTCTCC AGACAGCAAT AATGTAGCCA GCAGTGCTGT TGGAACTGCT CTGCCAAAAT TTGCCATCCG  
 AGGGATGCTG AAAACCTTTG GGCTTCATGG AGTCGCTTA GATGTTGATT CAGTGAATGA ACTGGTGCCG GTAGAAACGT  
 ACCTCCGCAG TGAAGGTGTG CTGGTGCGAT ACTGGTATC CTATTTGACA TGTGGGAAA GGGCCCCCAG CAGGCTACCG  
 AARGGACTT

SEQ ID NO:1915: (Length of Sequence = 402 Nucleotides)

ATGGTTTATA GCAGGAATAC TTGTTCTGAA TGAATTGGAG GGAAAGTGIG TGTGTATATG TGTGTGTGTG TGTGTGTAG  
 TTTTGTGAG GTAGGGGAGA CTATTTTGT GGTTCAGTCA CTCCAATTAT TGCCACAATG CACTTTCCTT CATAACTGCC  
 CCACCAAAGG TCTTAAAGC CATTTTGGG GCTATTGCA CTGTGTTCTC CTACTGCAA TATTTTCATA TGGGAGGATG  
 GTTTCTCTT CATGTAAGTC CTTGGAATTG ATTCTAAGT GATGTTCTTA GCACTTTAAT TCTGTCAA TTTTTTGGT  
 CTCCCCCTT GCCATCTTAA ATGGTAAGCT GAAACCTGG NCTACTGTGG CTCTAGGGG TAAGCCCAA AGGCCAAAA  
 AA

SEQ ID NO:1916: (Length of Sequence = 382 Nucleotides)

GAAATGAGAC TTTATTCTGA AATTATTAAA AAGAACAGAG ATGCTCCATT TGGCTGCATG CAGGGGGGGC GGTGGGGGG  
 ACAGAGGGGA GGACAGGGG TCAGCCAGG GACCGTGT TCTTCCAC GCAGGACACT GTGCATGGG CTCTGGGTG  
 ATCTCCCAT CTGCTATGG GCGTGTGT GTTAAAGG CCAACACAG ACAGCTCGT GGGTCTGT GTATCCAG  
 GCTAAAAGC AGGCTGGCTT TCTGGGGCC ACAGCTGGG GGTAGTATC CTGGAAGGT TCACTTGGT GCTTGGCCTA

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GGGACCAGCA AGGGCTTGGN GTTGAAGGG GTGGCTCAAG GAAGCCTCTT TCTCCACTCA CA

SEQ ID NO:1917: (Length of Sequence = 375 Nucleotides)

GAGATTAAAA TAAACAACAC AAAATGTATT TAAATGAGAA ATTGAAATAT TAAAAATAAT ATTAGGTGAC ATTAAAACTG  
 TCATAGAAAT AAACGTGATA TACAACAAAT AAATCAATGA TTGTTAACTT TTTTAGACAG TTTGAATATC AGATTATAAT  
 GAATAGCATT ATTAGCCAGT AAAAAGAGCA TATAAATTAT TTTAAAATTC CAAATAAAAA TATTTAAAT TTTGAAATTT  
 TGGACCCAAA ATTATGTCAG TAATTTTCATG AAAGTAGATC TCCAATAGGT CCTATATTCT AGACACTATG AAATGACATC  
 AGAAACCGTC AATTAAAGTG TACCCACAA GTGATACTA GCTACCATAC AAGTT

SEQ ID NO:1918: (Length of Sequence = 315 Nucleotides)

AATATACAGT ATGATACACT GATGTGCAGA ATGTGATTAG TTTATTAATC ATATGTGAAA ATATTAGTAG CTACATATGG  
 CCAGAATAGA TTTTYCTCTC TACAAATGTA AGTTAGTGT GATAGAATTT GTTATGCGAT ATTGTTCT TGGTTTCAG  
 TCTCAATGCT TTCCTCTGG CATTTTCATG ACTCTGTAAA TTAACCTCAG CATCAATTTT CTTTAAAT CAACAGTTAT  
 TCAAATTGAT CGGAAATTAA ACTTGTATGT AGCTAGTTAT CACTTTGGGG GTACACTTAA ATTGACGGGG TTCTG

SEQ ID NO:1919: (Length of Sequence = 285 Nucleotides)

CAGAAGTAAA AGATTTTAT TGTCTATAG AACTTCTGA AAGAGATCT AATTGAGAAA ATATACAAAG CATTTAAGAG  
 TTTCATCCCC AGAGACTGAC TGAAGCGGT ACAGCCCTCC TCTCCAAGGC TCAGGGCTGA GAACGGTAG CATATCGAAT  
 GATCAGTAAA AACATGCAA AGTNGAAG AAAGGGAAAA AGGTGCATC CCTAAGCTG AGGGGNTGG AATTCAGAA  
 CAGAGGWWGC AGGTGGACA AGTACCAGGT GGCTCTCCCT TTCCC

SEQ ID NO:1920: (Length of Sequence = 181 Nucleotides)

GCAGTTTAT TTTTATTT ATGTATTNA ACTGACTTAT TTKGTATCC CACTAGAACA ATACATTCAC AATATACTTG  
 CAGAACTKG CTGGSGCAT CAGGGGAGCA GAGAACTTT CCAGTGAATA GTTTTGAAG AAAGGAGTAA AATCTCCCC  
 AAACCCTAAA GGCATCCTT T

SEQ ID NO:1921: (Length of Sequence = 351 Nucleotides)

AGACGGGGTC TCACTCTKTC GCCAGGCTG GAGTGAGTG GCGCAATCTC AGCTCACCGC AACCTCCGCC TCCCAGTTA  
 AAACGACTCT MATGCCTCAG GCTCCGAGC AGCTGGGACC ACAGGCACAT GCCATCATGC CCGCCCAACC TTCTGTACTT  
 TTWAGTAGAG ACGGGTTTT ACTGTGCCAC ACAGGCTGGT CCGAACTCC CGACCTCAGG CGATCAGCTR CCTCAGCCTC  
 TCAAAGTGCT GGGATCACAG ACGTAAACCA CCATGCGGGG CCGAGTCTT TTCTTCAGAG GGCTCCTNAG CACCCCAAC  
 CCCAAACCTG AGGCTGTGA GAGTCTATCC G

SEQ ID NO:1922: (Length of Sequence = 198 Nucleotides)

CCTCATCTGG ACACAGATGA TTTGCCAAG AAGCGGCTG CCCAGATCTG CAAACCTTGC AACCCAGCAC TCTGCATAT  
 CTCGCTTAGC GTGCCACAA CTGGGATGCT AGCTGGCGTA AAGATGCTCA CGCAGCCACC AGTGCCCTCTG CCGTCCATAA  
 GTGCAGTGT ACTTACCCTC TGAGAGTGGC ATCTGCTG

SEQ ID NO:1923: (Length of Sequence = 303 Nucleotides)

TTGATTGGC TATGGTGTGA AATCCTTGT TATTTTCTA AAAAAATAA ATTTAAAAAG AAAGAAAACT AAGGAAGAAC  
 AAGANGCTAT TTACCCAAAG TGAGCTTNC A GTTTAGTT TGATGGCTG TTTGACTGCC TTTCCGCCCT ATGAAAATCA  
 AGAAAATCTT TTTTAAAAAT GGAGTCTGC TATTTTCCAC TCCTTGCA TAATACAAAT TCAGTTTGT AGGTTGGATG

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GTGAGTTGGG AGCTGTGATG GATCTGTGG CGGGTTTGG ATGTGTAAAG AATGATATAT ATA

SEQ ID NO:1924: (Length of Sequence = 231 Nucleotides)

GTCTCCCTG ATTCTCAACC TTGCAACCT GCTTCCTG ACTGCTAGGT CCAGTAGGC TTAACCTGA TCTTATATGT  
AGGACCGGT TTCACCTTAA GCAAGAGAAA TGTAAGAAGT GNTTCCCAA CTCAGTTGCT GGGCCAGCTT TGGCCTCGTG  
TTCCCTTCT GAGGACTGAC CTTTGGTATT GCTCTGGAGT CTCATATCCC CTTTGGCCCT AACTGACCAC G

SEQ ID NO:1925: (Length of Sequence = 249 Nucleotides)

GTTTTTACTT AACCATTCTA TTGTTGGGA TTGGGTTTCC ACTTTTNT TATAGATAGT GGTGCAGTGA ACATTTTAA  
ATAGCTTTTT NCTTCAGTGT AATTATTTC NTAGAGAAAG TTACCAAGAG TGGTTTFACT AGTTCAGAGG GCTTCAGGAT  
TTTATGGCT CTNCTAGCG GTGCTCTATT ATCCINNAGA AGACTTGTAT TACTTCCAGT GTCAAGAAGG TTGCNCTTCC  
ATGGAATGG

SEQ ID NO:1926: (Length of Sequence = 367 Nucleotides)

TTTTTCTCAG CAAGGAACAG TCATGAGAAA GAGAATGCGT TCCTAGGGGG AGGTCTCTAA AATGGCCACT CTGGGACTGT  
CTGCTCTATA TGGTTGTGGA TAAGGGATGA AATAAACCCC GGTCTCCCTT AGCGCTCCCA GGCCTATTAG GACGAGGAAA  
TTCCCGCCTA GTAAATTTTA GTCAGACTGG TTGCTGTTT TCAAACCCCTG TCTCCTGATA AGATGTTATC GATGACAATG  
CATGCCTGAA ACCTCATTAG CAATTTAAT TTGCCCCGT GCTCTGCCAT TTGCCCTGTG ATATTTIATT GCCTTGTGAA  
GTATGTGATC TCTGTGACCA CAACCTATTC GTACANITCC TCCCTT

SEQ ID NO:1927: (Length of Sequence = 231 Nucleotides)

CTTTTATG GGGCGGATAC CGCAAGGGCC CGCCCACGGT CAGGTATAGT TTCTGCTCTT GCAGAGGCGC KACAGCCTGA  
CACCTCCACC TGCCACCGC CGGGGTTAG TGGAACATGC AAAGCTCAGA GGTGGAGGC AGGGGTGGTC GCTGCTGAGA  
CCAGGGCTGN GTGCAACAGG AGGGTCAGCA CAGAGCCTGG CTGGTGTCCC TGGGCCCAA GGGGCTGGG G

SEQ ID NO:1928: (Length of Sequence = 283 Nucleotides)

CCCCCTGCTT CCCCTGAGCC CAGGTATGTA ATTCTACAC AACTGATCG AGCTTGINTG TGTGTGTATA TGTGTGTGTG  
TGTGTGINTT AATGTGACAT GCATGTACTG ATCCNGAGAA GCCTTTATAC CAAGAATAGA GCTGGGATCT CAAGCCACC  
CTCCAAGAT CAGACAGCAG AGTGAACAG GAGGCCAOGA CAGGCCTTGT GTCARATGGC AGACNTGCA GCAGGAAGCA  
GAACCACGGG ACGGGGRNCA TGGGATGCTA TKGGCAGCCA GCT

SEQ ID NO:1929: (Length of Sequence = 287 Nucleotides)

CTAGGAAGTA GGGAGAGAAT TTAATAAGTA AGGAGAGAAA GGAAAAAGAA CAAACATGGA ATATGNTCAA GCAAATAACT  
TCCAACAGAA ACAAGANGAT ATGTTTAA ATATATTTCC CCTGCCAAT AGTAAACTT ATTCAGGCA CAATGCATT  
CTGAGGTGAA ATTAAAGTAA CATAAATTG AAAACATCAC ACTGGANAAC ATTTTCATGGG GCTCAACTGA AGGTGGCATA  
GTCCAGGAAG GCATTTGGAC ATGTATGGG TGTTCCTTG TTGCC

SEQ ID NO:1930: (Length of Sequence = 357 Nucleotides)

ATGGAACACT ACTGCAACAG CTCCACAGAC CGGGGGTTC TGCTCATGTT CCTGGACATC TGTTCAGAGC TGAATAGCT  
CTGCTGAC TTGAGGCTG TCACTCTGG CACCCCTC ACCACATC TCTTTTAA ATGTAAGT CTCTTAGC  
AAAGCAAGA CTTAAGCAGC CTCAGAGCAA AATACCTCA TGATGTGGTGA AACCACCTCA GCTGTACGA GGGCCGAAC

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CACTACGGCG GCGTGGTCAG CCTCATCCCC CTCATCCTAG ACTTAATGAA AGAATGGWTC GCCCACTTCG AGAAGTTGCC  
GCGCAAGGTG CTGCAGGGCA CGCGGGCTGC CTGCACT

SEQ ID NO:1931: (Length of Sequence = 343 Nucleotides)

ATCACTTCCC CACCCACAG GATCTGCCCC AGAGAAAGTC CTCGCTGTC ACCAGCAAGC TTGCGGGTGG CCAAGTTGAA  
TGATGCTGCC CGGGGCTCTG CCAGATCCTG AGACGCTTCC CCTCCCTGCC CCACCGGGT CCTGTGCTGG NTCCTGCCCC  
TTCTGCTTT TGCAGCCAGG GGTGAGGAGG TGGCTCGGGT GTGGGCTGGA GAGGCAGAAG CCCTTTCCTG TTGGTGTCCC  
AGCATATGGA GCCCCTTGGG CTGAGCACCA AGACCTTGAA CCTTTTGTGT TTTACCTTTT TTCAAATAA CAGTTTGGAG  
AAATATCAAT GAAATCTGGG GGT

SEQ ID NO:1932: (Length of Sequence = 314 Nucleotides)

TTTCATGGGT TTTTGTTTTG TTTATTTTGA ATACTGAAAA AGTCCTTTGG GCTCTGTGGG GTTCCCCACG CTCACGGCTC  
CTTCTTCCCA CACTCACTGC CCTTCTTCCC ACAGCAAATC TATTTCAGG ACAGTACTTT TTAAATGAT TAATGTTGAG  
TTCTCAACTA GCTCTGCAGA ACTAGAGGAG CTGTTTGCAT CTGTCTGTGC GGATGGAGTT TCTTTTATCT GACACCAGGT  
CTCCAACCAC ACTGATGCAA GGCAITTTAT CTACAGAGCT CAACTAGAAC CCCITTTTCA TTAGGCTACT CCAA

SEQ ID NO:1933: (Length of Sequence = 378 Nucleotides)

AGCTTCCTGC GGGACCACAG CTATGTGACT GAAGCTGACA TCATCTCTAC CGTTGAGTTC AACCACACGG GAGAGCTGCT  
GGCCACAGGT GACAAGGGCG GCGGGTCTGT CATCTTCCAG CGGGAACCAG AGAGTAAAAA TGCGCCCCAC AGCCAGGGCG  
AATACGACGT GTACAGCACT TTCCAGAGCC ACGAGCGGA GTTTGACTAT CTCAAGAGCC TGGAGATAGA GGAGAAGATC  
AACAGATCA AGTGGCTCCC ACAGCAGAAC GCGGCCACT CACTCTGTT CCACCAACGA TAAACTATC AAATTATGGA  
AGATTACCGA ACGAGATAAA AGGCCCGAAG GATACAACCT GAAGGATGAA GAGGGGAA

SEQ ID NO:1934: (Length of Sequence = 239 Nucleotides)

ATTTAAATTG ACAGCCTTCC ATTTTTOGAG AAAGTACAAA CAGAACTGCT TTAGCACCCA TCGAGCCCCA AACGGGTAAG  
GTAAGCCAAG GTTTTAAATGA CCAGCCAGT ATCTAAGCTT CCAAACGAT GCCAGCCAT CACATACTYA CCTGGGAGG  
CTGCTGCACG GGCATTCTCC YGATGCTCAC GGCATTGGK GTAGGTTTCA RGATCGCTC TTTGAGGAAG GACTTCAGG

SEQ ID NO:1935: (Length of Sequence = 319 Nucleotides)

TTAATTTTTT TTTCCCATAG AGGAATAGCA TTACAGTCTA ACAATCAGAA TTCTGTACA CACATACACA GGCATGCCAC  
ATGACCCAGT TGAGGTGGTT GTTTCCTTGA GTCTGTGAC ACGTCACATG GTCAAAGTCT CCTCATTTCA GCCAGTCTCA  
ACACAAAACA CCAACAGGG ATGCACTCAA CTGTGTGGTT CCATGTGGAA CTAGGTGGCA GGGCGAGAGG GAAAGTAGTA  
GAAGGGGGCT ATGGTGTGTC TGCATTCACT CCCCTCATAT AAAGCCACAT GGATCTAGGG GGGGTATCCA AGAGCTCTG

SEQ ID NO:1936: (Length of Sequence = 415 Nucleotides)

CTATTTTTAC AAATTATACC TAATGAGTAA AATTAGTGTA AAGTGATAAC ATGCTTCTAC CTGTATTCT AGTGACCCCT  
TAGCGGCAGG TATTTATACC TGGTATTTAT GATGCAATAT ATAAGTGGTG AACATAACT GACAGTATIG TGCTTGCTGT  
ACATGCTGG TCTTTTGAAG CAGATTTTAG TAAGCATTTT CCAGAGGTAA AACTGTGTCC TTATTCTAAT TTTATTCCTA  
GGGAAAGTA GACAGGGATT ATTTCCTTGA ATCTATTTC AAATAATAT TTTTCTTAT GGTATTCTCA CACTTTAAGG  
CCTTTTGTG CAATTTAGAA AGTGTGGG TCCCTTCTCC TAGCCACAT CAAATTAAC TTCAAACG CTAGGAACAG  
TACAAGGAAT TTGAA



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SEQ ID NO:1937: (Length of Sequence = 393 Nucleotides)

TCACCTCTGT CACCCAGGCT AGAATGCAAT GGCACAATCT CGGCTCACTG CAACCTCCGC CTCCCAGGTT CAAGTGATTC  
 TOCTGTCTCA GCGGCCCAAG TAGCTGGGAT TACAAGCACT TACCATCACG CCCAGCTAAT TTTTGTATTT TTAGTAGAGA  
 TGGGGTTTCA CCATGTTGGC CAGGCTAGTC TCAAACCTCT GACCAGCGGT GATCCACTCA CCTGGGCTTC CCAAAGTGCT  
 GGAATTACAG GCGTGAGCAC CGCGCCGAGC CTGTINTTTCA TGTTAGATCA TAATATGATC TCACCAGATC CTTACTGAAA  
 ATGTACCTTA TTACAAGTAG CTAAATTTC ACATAGAGGG NTAAAAAGAT TGGGGAATCA GGTATGACT TTT

SEQ ID NO:1938: (Length of Sequence = 407 Nucleotides)

GGCCTCCCTG TGGGGTCAA TGCACTGGCT CAGATCATAG CTCACTGCAG TCTCGAACTC CTGAGCTCAG GCAGTCTACC  
 TACCTCANCC TOCCAAAGTG CTGGGATTAC AGGCGTGAGC ACCGCGCCCA GCCAGAACAT CTGTTTTTAC ACCCAGAGAG  
 CGCCCCCTGT TAGGACAGAA CCACGGTGCC CAGAGCCAGG AAGCGGCCCT CCTGGCGCCC AGCATCTGAG CTTCTACAG  
 TGATGGGCGG GCTCAGGAGA GGACAGGGAG TGTGGTGGGA AGTTCACAG CTGGCGCGT GGGGGGGCCC TTGCACCGCA  
 CTTCGCGCCT CTGACTGCC CGATCCCG CAGCCCCGT GTCCGATTGC ATTTYCCTCC TTTCTYCCAG GGTACTGGCC  
 CCAGCAA

SEQ ID NO:1939: (Length of Sequence = 412 Nucleotides)

GACATGCCAC CACACCAGTT AATTTTTTGT ATTTTCAGTA GAGATGGGGT CTCACGATGC TGTCTGGGT GGTCTTGAAC  
 TOCTGAGCTC AGGTGATCCA CACTTOGGCC TACCAAAGTG CTGGGATTAC AGGCGTGAGC ACCGCGCCCG GCTAAAAGAA  
 AGGAGATTCT AATGCATGCT ACAACACCGA TGAACCTTGA GGACATGACG TTACGTGAAA TAAGCCAGGA ACAAAGAGC  
 AAGGCTATAT GAATCCACTC ATATGAAGTA CCTOGATTAG CCAAATCCAT ACAGAAAGTA GAACAGTGGT TGCCGCGGGG  
 AGGGGGAAAT GGAAAGCCTA TATTTAATGA GTCCAGAAGC TTTTTTTTGG TTTTGTTTT TAGACGGAGT CTCGCTCCTG  
 TTGCCCAGGC TT

SEQ ID NO:1940: (Length of Sequence = 421 Nucleotides)

ATCCATCCCC TTGCCAGGG CCTCACATGC CGGCTCCCC CAACCGGTCC TCCCCCTGG GCTGCCGGTG CAGCTGTGGG  
 CCCAGGCTTT GGCAGGCCCA GCTTCAAGAC AGTGGGACAC AGAAACACT TTGCAGCATC GCCTCTCCCT CGGCCACCC  
 CAGGTACGCA GAGATGGGCC CCCACCGAG AGATCACAGC TCTGGTACAG GGAGGTGGG AGGGTTGGAG AGGAATGGAG  
 AGACATGTCA CCTCTATAGA AACCGGTCCA AAGTACAAGC TAAGCAGGGG GAAGGAGGAG GGCCAGAGAG CAGCCGGAAA  
 GAAGAAAGA GGAACACGGC AGGGGGTTCT KGGGAGGAG GGCCTCACAM CCCCCGCAG ATGAGCGTCT TCACCACGAA  
 GGTGTTCTTC GAAGTKGCGG T

SEQ ID NO:1941: (Length of Sequence = 377 Nucleotides)

GTCAGCTCTA GAGGCACCT GCATCATGCC CACCAGGGTG ATCCCCCTGG GATNGACCAT CTGGGATAT GAGGCCTCGG  
 AGGCTGGGGT TGAGATTGG TCTGAAGAG CTTATAGCCA GATTGCCACA TTCAAGTGTA AGTCCAGGAA AGGGGCAGGC  
 GGCAGTGAC AGGGATTAT CAGTTCAGA ACCTCACAGT GATAAGAGCC TTTAGAGAGC ATCTAATGGA GACCTTTAAT  
 TTTTCGGGGA GAGCAGCTGA GGCCTGTGG AAAATTAGTG GAGAGCTGAC AAGTGTCTTG GCTCCTGGCC CAGGGGTCCG  
 TGGTCCANCA CGTTGTGTT CAGTTGGAAG CAAAGGGCTT GCCCGTGATT ACCTTCC

SEQ ID NO:1942: (Length of Sequence = 401 Nucleotides)

TGAGACATT AAGAAGGACA ACAAATTAAC ACATCTTTTA ATAAATTC TATAGAAAGC TCAGTCAATAG GGCAATACT  
 CATTTCTCTT TCCCATATCA CCGAGGATTG AGAGCTCCA ATATCTTTTG GAGAATAAGC AGTAGTTTTG CTGGATGTTG  
 CCAGGACTCA GAGAGATCAC CCATTTACAC ATTCAAACCA GTAGTTCCCTA TTGCACATAT TAACATTACT TGCCCTTAGC

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ACCCTAAATA TATGGTACCT CAACAAATAA CTTAAAGATT TCCGTGTGGC GTGAACCATT TCAATTTGAA CTAATATCCT  
TGAAAAAAT CACATTATTA CAAGTTTTAA TAAATACAGT AGAGAGCTGG CATTTTTCTA AATACTGGAT TTCAGATCTG  
G

SEQ ID NO:1943: (Length of Sequence = 351 Nucleotides)

CAACTCAGGT TAGCAACTGC AGGAAACTTT TCTTCATTTT CACTGAATTT TAAAGAGAGA ATCCTGTCTC TATTTCTCAG  
AGAAACTTAG GTGAAAAGTA AAAGAGAGGC AAAATCTCTT TCCTTCATGA GATACTTTTA TTTTATCTC TTTCTCTACT  
CATGTGCTTA ACTGGTGAAA TGATTCTGTA GAAATAGATC CTTCTGATTC TGCATCTCAT TTCTTATGG CAACTACAAC  
AGGAGGAATC CAGCTGGAAA TGCCACTAAC CCCACATCCA GCACCTGAGA GAGGAAGCCA GTCCGAGCGC CGTGCTGGGC  
TCACTCACTC TGGCCTGCGC ACTGGGGTTG T

SEQ ID NO:1944: (Length of Sequence = 406 Nucleotides)

CCCCAGGCTG TCTCAGAATC TTGATGGGGT GGTCAITGAG CTCTCTTCC GCCAGAGCAA GATCAGTGAA GTCCTGGGAG  
GCAGTGGCTA CAACTCGGAC CGGCTCTGCC TGCCCTACAT TCCTCAGCTG ACAGATGAGG ATCGTTTATC CAAGAGGAGG  
AGCATGGAG AGAACATCTT CCTGAGGAT CCGGAGGATG GTCTGGTGAA GACCAACATG GAGAAGCTGA CCTTCTATGC  
CCTCTTAGCT TCAGAAAAAC TTGATCGTAT TGGCGCTAC CTCTTTGAGA GGCTCATCCG TGACGTGGGT CGNCATCGAT  
ATGGGTACGT GTGCATTGCT ATGGAGGCTT TGGACCAGCT GTCATGGCC TGCCACTGCC AGAGCATCAA CCTCTTCGTG  
GAGAGC

SEQ ID NO:1945: (Length of Sequence = 362 Nucleotides)

TCAATTTGTG AAATNAGAA TTCTGCTATG ACAAGTGGA AATTGAGAAA AGACGAGAG CCACTTTTIG TNATCGTGTA  
GGTGACAAGG AGTCTCCCAA GTATATCTCG CTAATAGGAG TAGCTCTCAA AAGTTAATCT CAATAAAGCC TCCTAAAGTC  
TCTGGCAAAG AAAACTGCTG CAATCCCTTG TGCAATTCTC CAGACTAAGC TGTATGGGGG AAGCCTACCT TTTTTCAGCC  
CGAAGTTCAG GAGACTGAGG ATGTAACTGG GGACATGATC ATTGNTCAA AGGTGATTGC TTAAGTATCT TAAAATGTA  
TAGAGCTAAT CTGAGTACCG CTAAATTCA AGAGCCGTGG CT

SEQ ID NO:1946: (Length of Sequence = 408 Nucleotides)

AACCTCINAC CCCCAGGTTT AAGCAGTCTT CCCACCTCAG CCTCCCGGGT AACTGTTCTT TGTAACCTCTC TCATCATCGA  
GGCTATATAT TAATAGACAT GGTATTAGC CCACACGAAA CATTGAGAA TAGAATTGGA TTAAGAAGAC GCGTTTGGC  
ATCAGCTGA CTACTCTCA TCTCCGTCTT CCGGGAGGGT GATGCCAGCG TGGGACTCTT TGAAGGCCT ATCAATCACA  
GGTGGCTAA AATCAAAAGG TGGTCACTA GGTTAGGGAG GGNGCGCGA AAGGAGATGC CAGCGGTGT TAAGAAGGAT  
ATGGTCAGAA GAGCTCTTG TCTCCATCCA CCGGGCTCTT GTCAGCCCG TGTGTCTCG GTGAGTAATT CCGGAGCACT  
GCACGGCT

SEQ ID NO:1947: (Length of Sequence = 426 Nucleotides)

CCATTGACA CTGTTACTAT CTGCAACAGT TCTTGAGTA GAGGATGCAC TTCAAAGTGC ACTGCTTTAC TGTCTCACTG  
GAATCTAAA AATCTAAGCT TTATCTTTT AACATTAAGC TGTGTGGGAA TGTAGCAACC TCCTGGGTGG TGGGGTGGG  
GGCATCTTCA ATTATTTAGG TCTCACTGGA AAGTTTGAGA TCAGAGTTTG GTAGGTGGT TAAGGGGACA ATGAGTAAGG  
GAGAGAAAAT ACAGGACTGA CTTGGGCAAA AAAACGCTG ATAATAATTT GTGAAGCAC TTTTCAAAC CATTTATTCC  
TTACAAGGAT CCTAAGAGG GGTATTATG TCCNGTTAT ACCTGGAGGC TTAAATTGAA GGAACATCT CAAGGGCACA  
CAGTTTAATG AATGGCTGAG GTAGGA

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SEQ ID NO:1948: (Length of Sequence = 349 Nucleotides)

TTACAATCTG GCTGGAAACA GATAATTAGA ACATATCAG AGAAACAGAA CAGTTAAGTG CCAAGCTCTG GTGGAGGTTT  
 TAAGTGCCAG AGGTCAGGAT ATATTTTTAA GTGCTTCTGC TTCCAAACAT CACTCTTTCA AAACAAAACA CAAAGATCCC  
 CAACCAGCAT TTCTGCCCC TGAGGCACCA GCAAGGTATA TAAACGGGCT TGCAAAGTTT GATATACGGT CTCCAGCCTG  
 GCITTTCTTA GTCTGGGCTC AAAAGCCAGA AACCTCTGGG GGCCAGAGAA GCGCTCTTTG TTTGCCAAAC AGCATTCTCG  
 CACATCCTGT TCTACAGCAC CGTCAGTTT

SEQ ID NO:1949: (Length of Sequence = 378 Nucleotides)

TTCATTCCIG ATTTTATCCC AGCTGTGGG GATATTGATG CATCTTTAAA GGTCCCAGT CCTGATGGAA AGCCTGACAA  
 CCTTGGCCTA TTGGTATTGG ATGAACCTTC TACAAAGCAG TCAGACCCTA CGGTGCTCTC ACTCTGGTTA ACAGAGAATT  
 CTAAGCAGCA CAACATCACA CAACATATGA AAGTAAAAAG CCTAGAAGAT GCAGAAAAGA ATCCCAAAGC CATTGACACG  
 TGGATTGAGA GCATCTCTGA ATTACACCGT TCTAAGCCCC CTGCGACTGT GCACTACACC AGGGCCATGC CCGACATTGA  
 CACGCTGATG CAGGAATGGT NCCCGGAGTT TGAAGAGCTT TTGGGCAAGG TAAGCCTG

SEQ ID NO:1950: (Length of Sequence = 357 Nucleotides)

TCATAACTT TAGGAATGAA AGAAAACAT TCCATCCCTC TCACAAAAG GACATCTTTT AAGCTTTCTT CCCAATCTAA  
 CCTCCATGGG ATCTCAGAAA TTCCAATTCT TATAACTCAA ATCCCCACAG TGGTGTAGAT GCATTAATCTC CCGGGGACA  
 GCAATCTGAG GCAGGCAGGT TCATTAAACA AACATGTTCT GTGCCCTCTG GCAGAGAGGG CAGCAGGACA TGCACTGCCC  
 CTGAGCCAAG CTGTGGCATG GGCAAGGACA TCAAGTAGCT GACAACGGTC TGTCCATCTC AGCTGGGGCA GAGGGGCCAG  
 TTCAGCCTTG AAACAGCAGT TNGGGAGTGT CTCAGCT

SEQ ID NO:1951: (Length of Sequence = 336 Nucleotides)

CTATCTCCCC AAATCTACGT TTCACCATTT GTACTGTTAT TTTTTTAGCC CAAGCCACCT TTATGTCACCT CCTGGAACAT  
 AATAACTGCT TTCTCACTCA TCTCCTACAT TTINACCTCT TATAATACAG TCCACCTTGT ACCGAGCAAC AAGAGTTATC  
 TTTCTGAAAT GCATATTAGA TCATGTCACA TCTCTACTTG AAGCTCTCTA AAGATTTCTC ACTAAAAGCG AAGTCTAAAA  
 TTCCACCCA GACCTATAAG GNCCTTAAAT GATCTTACCT CTCTACCTAC CTCINCGATC TTACCTATCT TCAACCTCGG  
 TTCTATTTTC TATATC

SEQ ID NO:1952: (Length of Sequence = 413 Nucleotides)

CAGTATGTAA TTTAATCAGC AAATGCCCCA TTCCATCTC TACCGGAAAG CTTTCAGACG CATTCOCAGA TCAGACAGAG  
 GACTAGGGTT AAGGCTGGGA ATGAAACACC AGCTAGTATC CCACTGAGCT TTCCCAAACA CACATACACA GCAAGTCAGA  
 CTAAACAACG TCCAACGTAA GACTCACCTC AAATACTTAG ACCTAAGATT CACGTCCAGG CTCTTTCAGA TACACCAGGT  
 AAGTAAGCAC TTGGCATTCC TATCTCAGCC ATTCACTTCA CAGAATCTTT TGGGTGCTA CTGTGTGCCC AATACTGTGC  
 TTAGTGGTAC TTGCCCTCAG CAGGAAAAAA AATTAAAAGT GTTAAATGTT ATGAAGGAAC AGATTGGNAT AGGAATCACA  
 AGGCATTGAG GTC

SEQ ID NO:1953: (Length of Sequence = 382 Nucleotides)

GTTTCACTCT TGTGCCCAG GCTAGAATGC AGTGGGATC TTGGCTCACT GTAACTCTG CCTCCCGGGT TCAAGTGATT  
 CTCTGCGCTC AGCTCCCTA GTAGCTGGGA CTATAGGTGC ATGCTGCCAC ACCCAGCTAA TTTTTTGTG TTTTATGAG  
 AATCAGGTT TCGACATATT GCGGAGCTG GTCTTCACT CTGATCTCA ATGATCTGG GATCTAGGT CTCTTAAAT  
 GCTGGGATTG CTGGCCTGAG CCACCGCACC CTGCCTAGAA CATGCTTTIN AATAGTGTCT CTAACCATCA TGTTTAGGGC

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CTTAGTGCTT ACCTCTTAAA GAAGGGCTGC TGTGAGGAT TCCNIGAGAT AGTGTTTGAA AA

SEQ ID NO:1954: (Length of Sequence = 389 Nucleotides)

GGAAAGCGG GACCCAAACA GTGGTGCTGG GGAAATTTGT TCCGTGTTCC TTTGGAAGGC TGAGTGGGTG ATGCAGCACA  
GGAACAAGGC TTGGACGTCA GAGGTCTCAT CTTCACTGTG ACAAAGCATA AAGGACTTGG GGTGAGCGT GTGINTGGGC  
TCAAGTGACC ATGCAAGTNC TGTACCTCC TTCCTAAGAC CCCATCCTTC TCCCAAGTCC TCCACAAGAG CTACCTTCTT  
CAAAACAATA ACAGAAACAC ATCAAGNTTN GCGTCACTGA AATTGAAGTT CTGAATTCTG CCGTCACCCC AGCAACAGTG  
CCAGTTATGA TGAGACACTT GACCCAGCAC TTGGGTTGAT GTCTTTGGCT GTTACCGTGG CACCTAGGT

SEQ ID NO:1955: (Length of Sequence = 277 Nucleotides)

GCCTCTAACT CCACGGCTCA AGTAATCCTC CTGCCTCAGC CTCCTAAGTA GCTAGGACTA CAGGTGCACA CCACCACACC  
CAGCTAATTT TTTTNCITTT TGATTTTGG TAGAGATAAG GTCTACTAT GTTCCCGAG CTGGTCTGAA ACTCCTGGCC  
TCAAGTGATC TGTCTTAGCC TTCTGAGTAG CTAGAAGTAG TTTTAATGAC CNAAGAATT ATGTGTTTAC CNGTATTTT  
ATGTGTTTTG TTAAGACATT CAGAATTTAG AGAAATG

SEQ ID NO:1956: (Length of Sequence = 380 Nucleotides)

GTGTAATGTT CTGAGGGTGG CGAATGCAGG GGCGCGTCC TCCCGCTGTC GATCTGGAAC ATCTTCTCGC CAACAAAGAG  
CAGGGTGAAG ATGAGGGCAA GCTGGTAGAC AGCATGGCCC AGGATGTTCT TCATCATGGT CCTGGAGATG AGCGGCTTGT  
TGCGGCCGTA CGGTTTCTC AGCAGCAGGG TCTCCGTGGG CGGCTCAGTG GCCAGTGCCA GCNAGGCAA CGTGTCATG  
ATGAGGTTCA CCCAGAGCAT CTGCACGGCC TTCAGAGGGG AGTCTGCGT GATGCAGGCG CCTNTAAAGC CACAATCAG  
GCCACCACGT TGACGGTGAA GCTGGAACCT CAAGAATTIN GAGATGCTGT CATAGACGTT

SEQ ID NO:1957: (Length of Sequence = 328 Nucleotides)

TGTGATGTT CTTTTTACG CTGTGATGT GGTAATGTT ACTGATTGAT ATTTGAATAT TAACTGGCT TTGCATCCCT  
AGAAATATACC TCACCAGGTC ACTGTGTAAT AGGTGGTGC AAAAGTGCTT GCCATTTTGG ACCATGAATT TTGAATCAAT  
AAACTAGGC TCAAACACAT CTGTATTAAT CAAAGTAAGA ACCATTACAA TCAACACAAT TTTGCCAACA AGAAATAAGT  
TTGTTTACTC CTGTAGCATA AAAATCCGTG CTTTGAGATT CGAGGAACCT TTGNAAGCA CTTTCTGCAT CCGCTGGTT  
GTGGAAGC

SEQ ID NO:1958: (Length of Sequence = 254 Nucleotides)

CTAGAAAGTA TCTTCTCTTT ATTTAAGTTA AACAAATTTT AAGGATGGTT TCCATCTATA AAATGGACAA AGTACAAGCT  
CTGTACAGCA GTTCTTTTTA AAAATCAACT GGAAAAAAATT ATTACCAAC TATATTTTGA ATTTGCAAAA CATACTCACA  
GATACCATCA TCTGAGCTTT TATGAGGNCA TAAGAAAGGN CCACCACAGA GAAGACAACT AACTTCGGCA CGCTTTGCTC  
GAAGGGCTCT TAGG

SEQ ID NO:1959: (Length of Sequence = 259 Nucleotides)

GTAAACGAG AAAAATCACA ACAGAGTAAT AAAGATATAA AACTTTTACA ATTAACACTC ATCAGTGTGA TAACTAAGC  
CCATGTAAAA GTAAAAATCT CTCACAGTTA ACAACGTTCT TTACTTTTAC TAAGAAGGAA CTGAAATTAA AGTCTTAGT  
CACTTTGGAG GTGGCTGCAA AAGCTCACAA CATAGTTGAT CCTTAAATA ATATGAAAG GCAACAGTG CTGCCTTTCT  
CTACTCAACC ATGCAACTG

SEQ ID NO:1960: (Length of Sequence = 329 Nucleotides)

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GACTACAGGT GTGCCCCACG ATGCCTGGCT AATTTTTAAG GTTTTTGTAG AGATGGGGTC TTCCTATCTT GCACAGACTG  
 GTGTGGAATT CCTAGCTCAA GCAATTTTCC TGCTCAGCC TCACAAAGTG CTGGTATTAC CCGTGTGAGC CACCGTGCTC  
 AGCCCACTCA TGTATTTCTA ATTATTGTAT TTGTGAAC TAATATGAAC AACAAAAACA AACAAACAAA CAAAAAGGGT  
 GGCATTTCTG GGCCACCAGG GAAGGTGGGA TTGGGGTTC AGCTATTTTC AAATTATATT AAAAGCAGGA TCCAGTTAG  
 AGCGCTATC

SEQ ID NO:1961: (Length of Sequence = 282 Nucleotides)

ATCCTCCAC CTCAGCTTCC CAAAGTGGTG AGATTACAGG NTCAGCCAT CGCACCOCGC CCAATTATTC TTTCTAAACC  
 ATTTCCCTT CTGTGTCAT GCTTTTAAA ATAAATTA AAAAAAATC CTTAAATTT CTCAGGTGTT  
 TTCCATATCA TTTTATTATC AAGAATATGG CTAATCAGAA GTCACAGCCA GCCCCGAAC TACAACACTA AACATGCAT  
 ATTATAGGCT AACTGAGGG ATTCTGAGG TTAGCAGATG CA

SEQ ID NO:1962: (Length of Sequence = 328 Nucleotides)

TGCTGGTGC CTGCTGTCA TCCTCAGGAG GCCAATCAG TCCAGCCTC TCCACCATC TTCCTGCAG CGATTCTTC  
 GAGCTCGAAA CATCTCGGC GTGTTCTGG CTGACCACTC TGGTGCCCTC CATAACAAT ATTACCAGAG TATTTACGAC  
 ACTGCTGAGA ACATTAAATG GAGCTATCCC GAATGGCTGA GCGCTGAAGA GGACCTGAAC TTTGTAAACAG AACTGCCAA  
 GGCCCTGGCA GATGTGGCCA CGGTGCTGG ACGTCTCTG TATGAGCTTG CAGGAGGAAC CAACTTCAGC GACACAGTTC  
 AGGCTGAT

SEQ ID NO:1963: (Length of Sequence = 277 Nucleotides)

CCAAGAGACA CCCCCGCAC TCCTGTGCCC GAGCTGTCTC ATCTGTGATT CACAGTCTGC TCCTTCGGC TGCTTGCTG  
 GAGAAGTGAT TTTNAACCCC GAGGTAGAA AGGGAGCTAT TTTTGAGCTG CTTTTTGTTA AAAGGCAAAT TTTCTGCTGG  
 GGACTGGCTT TACCCGCTCT ACCTAAATCA TTTCTTACTG CCTCTGTAA CAGTGGCCTT TTGTGTTCTG CTGGNATTG  
 TTTGAACACA GTCCACAGGT TCAGTGGTIN CATCTCT

SEQ ID NO:1964: (Length of Sequence = 230 Nucleotides)

CAATGCAACC TTTTAATTCC AAGCAGAGTC CCCCTCCCC AGCATGGTCA CACACACAGT GGAAAGGGAT GTCAGGGTCT  
 GGGCAGGAGC AATACCCAGA CTTGGGCAAA AATATAGATA TCATTATATA CACACGTGGA CTGGAAAGAA GTCAAGCTGG  
 GGGTGTAGG TAGGGCAGGG GCAGGTGAGG AAAGCAGCTG GGGGGGCCCC AATAAATTAC ATTCTTGAGA

SEQ ID NO:1965: (Length of Sequence = 299 Nucleotides)

CGCGTGGAT CCGAGAAGG CACAGCAGAT GCGCTTCCAG GTGCATACCC ACCTTCAAGT GATTGAGGAG AGGGTGAATC  
 AGAGCCTGGG CTGCTGTGAC CAGAACCCCC ACCTGGCTCA GGAGCTGGG CCCCAAATCC AGGAACTCCT CCACTCTGAA  
 CACCTGGGTC CCAGTGAATT GGAAGCCCC GCGCTGGGG GCAGCAGCGA GGACAAGGGT GGGCTGCAGC CTCCAGATTC  
 CAAGGATGCA GACACCCCCA TGACCTTCC AAAAGGGTCC ACAGAACAAG ATGCTNCAT

SEQ ID NO:1966: (Length of Sequence = 320 Nucleotides)

GTCCCTGCAC ATGGGTCTGG CAAGACGGT CAGCTTTGTG GTCTGAAGCA GGAAAGTTTG TCTGINCTTA GCCAGTAGCT  
 TGGCCCTGTT GCGCTGGT GTGTAAGGAG AGAGACTTGT AGCTTCAGGT CTGGATAAAT NACCCCTTGA GTGTGGCTCC  
 GTGTGCTTC GAGTGGCCCC CTCTAGTGA GTGGGGTTC TTAGTCCCC ATACTTCTC CAGTAGATCC AACTGGTACC  
 ACAGAGGGG CACTGCATGT TAGGTGGGCC CCAGGCATAC CACTGAGCAG ACTGTGTGGT GTGGCAACTC TCACAAGTCA

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SEQ ID NO:1967: (Length of Sequence = 296 Nucleotides)

GCTCTGCTGG CCGTGCAGAA GCTCATGGTG CACAACCTGG AATACCTTGG CAAGCAGCTC CAGTCCGAGC AGCCCCAGAC  
 CGCTGCCGCC CGAAGCTAAG CCTGCCTCTG GCCTTCCCCT COGCCTCAAT GCAGAACCAG TAGTGGGAGC ACTGTGTTTA  
 GAGTTAAGAG TGAACACTGT TTGATTTTAC TTGGAATTTC CTCGTATTATA TAGCTTTTCC CAATGCTAAT TTCCAAACAA  
 CAACAACAAA ATAACATGTT TGCTGTATAA GTGTATATAA AGTAGGTGAT TCTGTA

SEQ ID NO:1968: (Length of Sequence = 311 Nucleotides)

ACCCCTTCA CTCCTCCCA CCAGCTCTGC AGCCAGCCTA TGGCAATTAT ATTTTAAGAG GTGTTCCAG GACTTTTGGG  
 ACCTACTAAA ACAATGATGG TTATTTTAGA TGTGATGATT TATATTTATG TAGAGATATT TCTGGACCAC TCAAGCTCTT  
 CGATACCAA ATCAGGAGCA TCTGGGATT TATTAAATTA TGTAAGAAGA TAGCACAGAT ATCGGGATAT TATTGTGTGA  
 AAATGCTGCT TTTACTTTGA TGTGATCTCA TTGATGTACA CAACCAAGTT CCAATAAAGT GCTAGAATGT G

SEQ ID NO:1969: (Length of Sequence = 266 Nucleotides)

CAATAATAAA AAGGATTATA TTCTGATAC ATGCAATATG GGTAACCGT AAAAATATCA TGCTGAGCAA GAGAAGCCAA  
 ACACAAGAGA ACATGTTGTT ATGATTTTAC GTACATGAAA CTTTAGTAAA GACAAGTCTA ATCCATAGTG ACAGAAAGCA  
 AATCAGTAAC TGCTGACAGG GGCAAATGAG GNGATGATCT CAAGGGNACC TTCTGGGGTA AGACGCTGTT CTGTATCTCG  
 ATCGNATTGG TGGTCACACA AGTGAA

SEQ ID NO:1970: (Length of Sequence = 317 Nucleotides)

CTCGGGAGGC TGAGGCAGAA GAATGGGTG AGGCCAGGAG GCGGAGGTG CAGTGAGCCA AGATTGCGCC ATTGTACTCC  
 AGCCTGGGCC ACAAGATTGA AACTTCATCT CGGGGAAAA AAAAATGAGC TAAATACAAG AGATGGTAAT GCAGGAAATG  
 AGAGAGAAAG AAGCTATAGA ATGCACCATC AGTCTTTGCT GAGAGGAGAA GCTAGGACAC TTATGCGCAT GTNCTGTCT  
 GCCTTCCTTC CGTCCCGCG GATGGTTGGA GCAGGTCTTT GTTGTCTGCA GAGCATGCCA TGTATCTCTC CTGTCT

SEQ ID NO:1971: (Length of Sequence = 263 Nucleotides)

GTGCATCTG CTGAGGCGGC TACGCTGGCA GGGTAAGCAA AAGAAGCACC CCAGCCTAAG TTTACAGAGA ACCAGGACAT  
 CATTTTGAAT ATAACCTAGT TCTAATAGTC AAATGGCCAC TCAAGGTGAC AAATAGGAAC TTCAGTGGTC ACCCCTCGGA  
 AGCAAGCTTT CAATGTCCC CACCTGTAGA AGGCTGAAAA ACATCCTCCA AAGATAACAG GTTCCAATCA CTGGAACCTG  
 TATTACTTAT TACCATTAAA TAT

SEQ ID NO:1972: (Length of Sequence = 295 Nucleotides)

GACAAAGAAA GCAGAATAAT TTTACCTGAG AAGAAACCAG GAGGCTTCTT CTCTTCTTC TCTCTCTTT TTTTTTTTTT  
 TTTTIGACTA TACAGAAGAA AACTATCAGA GTTAGGTTAG AGAGTTGGGT TTGGGGTCAG GTGTAGCAT GTGTATATT  
 ATGGGTAAAT TTGTGCTCT CCCAAAATTA ATATGTTGAA GTCTTAACTC CCTGTACCTC AGAATGTGAC CNCATGGGGA  
 AATAAGGTCA TTGCAATATA ATTAGGTAAA ATAAGGTGAT ACTAGAAGAG GGTAG

SEQ ID NO:1973: (Length of Sequence = 243 Nucleotides)

AGACCGCAGT CATCTCAGC ACTACAGCA GGCCATNTNC AAGCTGACCG CAATGCTCAT TAGCAGTAAA GATTGTNACC  
 CGCAGCTCCT TCATCATCTG TNCITGGGTC CCCTCCGGAT GTTCAATGAG CATGGCATGG AGACGGCCCT GGCTGCTGG  
 GAGTGGCTG TTGCTGGCAA GGATGCAGT GAATGCGGT TATGCGGGA GATGCGAGG GCTTGGCACA TGAAGGTGGA  
 GCA

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SEQ ID NO:1974: (Length of Sequence = 304 Nucleotides)

GGATGAGATG ATCGACGTCA TCGGGGTGAC CAAGGGCAAA GGCTACAAAG GGGTCACCAG TCGTTGGCAC ACCAAGAAGC  
TGCCCCGCAA GACCCACCGA GGCCTGCGCA AGGTGGCCTG TATTGGGGCA TGGCATCTG CTCGTGTAGC CTTCTCTGTG  
GCACGCGCTG GGCAGAAAGG CTACCATCAC CGCACTGAGA TCAACAAGAA GATTTATAAG ATTGGCCAGG GCTACCTTAT  
CAAGGACGGC AAGCTGATCA AGAACAATGC CTCCACTGAC TATGACCTAT CTGACAAGAG CATC

SEQ ID NO:1975: (Length of Sequence = 233 Nucleotides)

CCTTCTCCAT CACCTTGA CCTCTCTGA GTGGTCTCTC AAGGCACATT TATTTTCTCT GCTGCAACCT ACCAGATCTG  
ACATCCACCT CCCCCAGCAC CCATGGGCCA AGGAGGCCCTG GGGCAGCCAA GGGGAGTTCC AGGACCAAGC AAGCAAGAAA  
COGTTCTTTG AACACATGGT TAAGCTTCTT CCAGCATGGC CCTAATTCCC CTACCTGCCT AAGCCAGGGG AGT

SEQ ID NO:1976: (Length of Sequence = 162 Nucleotides)

AAGTGTTACA AGCCCCAGAA TGCTGCCCGG CCTGCCCTGC TGGGCGGACT GTCGTGTGT CTGINTCTCT GCGTTCCAC  
CTCCAAGCCT ATACCAGCTG TGTACAGCGC CATCTCTCTG CCTCTGTG CCCTCACTC ACCAAACAG TGTATTTATA  
GC

SEQ ID NO:1977: (Length of Sequence = 270 Nucleotides)

GGCTGAATTA AGAGCATCCA GAAAGCCAG GCCCTCCATA GGCTGTGGCG GGATGATCTT CACTTTGATC TCTTTGGTGG  
CATTAGGTGT TGTGTGAGT GGCTTGTATT TCTTCTCTGC AGGGGGAGTG GCATCTCTG GAGCAGCTAC GTTGCTCTGA  
CGTTGAGGG GGATGGGTTT AAGGTTGTAC TTGTCAGAAA CCACCACTGT GCTGGCATTC TTCTTCACAG GCACCAAGGA  
TGGTGTCTCC AGCTCTAGTC CAGTGAACG

SEQ ID NO:1978: (Length of Sequence = 167 Nucleotides)

TTCAGGAGT TGCTGATATT TATTCAAAG TCATCCATAC AATAAAGAAC TCINCTTTTA AAATTCCATT TACATCAGCA  
GTTAAAAAAA AGTGACAGTG GATGAAACAT GANGCTGTAA AGTGCCTTTA TGGGGAATNC AGCCAGCCT GCCTCCACTG  
TGCTGGG

SEQ ID NO:1979: (Length of Sequence = 346 Nucleotides)

CATCATAGCA ACAAAGGCT ATGTACTATA CTCAGGAAAA CCATTTATTT GCACTGGAGG CAACTGTCTT TGAGAGAGGA  
AAAGTAAATT GTCCAAGATG TAACATCTTA TAAATAGCAA AGCAAGGATG AAAATTATTA TATTINACTA AATCAGTATG  
AGAATCCTGA TTCTTCATTA TTATATCCCC AACACTCTAT CAGTTTGTG AACAAATCAA CAAATAAGCT TGAATAAAGG  
NTCCACATCT CAATTCTCCT CCACCATCT ATATTGCCCT TCATCCCTAC ATTAAAATGN TTATTTCTGC TTTTTTCTT  
TAACAATTA TCCCTAAAGT AACTAG

SEQ ID NO:1980: (Length of Sequence = 174 Nucleotides)

CACAACTGA CAGAGGAGAC AGGAGGAATT TAATATTACA TGCTATAATG ATATTTATCT CACAGTTTAT ATTTCAITCA  
TTTATATTAT TTTTTTAAAA GGTTCCTTTA TCAGCTACTA AACATCTCAG CAATTTGGTG TGCATAGCTC TAGATTAGC  
AACAAAGAAAT TGTA

SEQ ID NO:1981: (Length of Sequence = 276 Nucleotides)

TGGNCTACTC ATAAGTTTTC AGTGGTTAAT TACTACAGTT TAAGAAGACG TGTGATTAT TTTTAGATCT GACCCAGCAG  
ATCATACCTN TNCNTTGAAT TACATGGTCT TCTTTTGGCT TCTAAGATGT CACACTCCTG TCTTAGTGGC CACTGCTCCT

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CAAGCCCCCT TTGCTAGCTC TTCTCATCT GTCCAGCCCT AACCTGACCG TGCTATGTAA GTCCTCTCCG TTTTCACCCC  
CTNCCNGGGT GACCGTTATA CTNCCAAACC TACAGG

SEQ ID NO:1982: (Length of Sequence = 288 Nucleotides)

GCTGCAGAGA GGTGTGINTCC AGGAGCAGGC TTTCCCGCTC GGGATCCAGG TCATCCCCCA CCAGAGAAAT TTCACAGCCA  
TCCAGGTGTG GCACAATCTC ATCCGACATG CGTGTINTCTG TCACTGTGCC CTGCCAACTC TCATCCTTTT TGGCCTCCAC  
CTGGTGAGAA ATGGAGCAGG TGATTTGAAG ATCAGGGAAC AAAGGGACGC CGTTGGTTCC CTCAAAGTCC ACAGCTNGGC  
GGGCAAAATG AGCAGTGCCA CTCAGCAGGA TCTGGGGGGC GTCAGGCT

SEQ ID NO:1983: (Length of Sequence = 273 Nucleotides)

CACAAGCCAC TTTCAGCCTC CAGTGGGAAG GCTCCAGCCA CACGCCGATA TTTCGTCTTG CTTCCTGTCA TCTCATATCT  
AAAAGTCATG GCTTAAGTTA GGCAATAAAA CTTGTGGCTT TAGGCATCTT TAGTAAAAAA GCTGAACAAA TCCCAAATTT  
ATTCCCATTT TCTTGAGAAA TAACTTCAT AAAACAACAG ACAGCTGTCA TGATTACTGA GTTTTGGCTG ATGGCGAAAT  
AATTTTTATG TAAGTATACT GAATAACAT ACA

SEQ ID NO:1984: (Length of Sequence = 221 Nucleotides)

GAAGAGGCTG CTCTGGCCTG GGACACCCC ACTGCTCTCA AGGAGCTGGC ATCTCAGTGG CCTCTNAGCC CAGCCTGAGC  
CCTGTGGGAG TNOGGGGGCA GTGACTGGAA TGINTCTGCTG GGCAGGCTGC AGCAGCCGAG GTGGCCCCAG GGCAGAGGAG  
TGCAGCGCAN CTCATGGGTG CCCTATGCCA CCCCTGGTGC TCACTGGGCT GCTGATGCCG T

SEQ ID NO:1985: (Length of Sequence = 197 Nucleotides)

TTGCTACCAT GAGGGAAGTG CTCGTTGCTT GGCTTACAGC AAGTATACA GCCTGCGAGG CACAGTCCCC AAAAGTCTAG  
CTGCAATTCT ATTGGTGGTT TTCCCCAAAC AGCAATAACA AGATGTTACC TGGAAGCACA CCAGAGCCAA TCATGACTCA  
GGCCTGTCTA GATGTTTAGA TGCTGGAAA TATATTT

SEQ ID NO:1986: (Length of Sequence = 268 Nucleotides)

CACTTGACCA TTCTCTTTA TTGTTACAT TCCAACCCAG CACAGTCACA TGCACACAG GAGATCAGAA ACCTTTNGGC  
CACAGCCCCA GGAGCCCGGC GGGGGGAGG GCGGGACGA CAGGGGCGG GCGGGCCGT GGAAGACTCC TCCTACCGAG  
CCTCCAGGC GNTCGGCGTT TGCATAACA AGAGAGCTGG AGAGGNTGCC CTCAACAGTG CGCTGGGGA AGGGGAGGGA  
ACGTGACAGG CAGGTTNGG ATAGGGAC

SEQ ID NO:1987: (Length of Sequence = 282 Nucleotides)

GTCTCACTG TAAACAAATG AGGATGGAGG ACACTGAGAG GNTCAAATAT GAAAGGCAGT ATGGGGAGTT AGAGCCACTC  
GTCTACTCT GTAAAGAGCA TGACTACTCA CAGTCTTTCT AGCGGGTAGT CACTCTTTCA TTTAACAAT ACTTAGTCCC  
TGCAATGATC TAGGATAATA ACTCAACAGT GTATATCAAG AGCCTTTAAA AAGTTATACC TGGCCGGGCG CAGTGGCTCA  
TGATGTAAAC CCTAGCACTT TGGGAGGCCA AGGCAGGCAG AT

SEQ ID NO:1988: (Length of Sequence = 226 Nucleotides)

ATAGGGGGT TCGTCTCTC AGGAAGTTAG GCCATAATTT CTGCAGGTTT AGTGATTAA TGGGATCCAT CCGATGCTGT  
CTTGAAGTGT TCAGGAATGG GAAATTCTCT ATAATCACCA TCTTGAGGGA TAAGTATGTT CATTTGAGAT GAGTTGGGCG  
TCAGGNTCTC ACAGTCTAAT GCATCTTAC TGAGGTATAT GTGGCAACCT TCTGTCTTAT TAATGG



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SEQ ID NO:1989: (Length of Sequence = 193 Nucleotides)

CTCCCTGTAG GTCATGTCCT TGAGAGTTAA AAGATGGGTT GAGTAGGCAG AGGTCTCAGG CACCGGGGAC AGAAGACAAG  
 GACATTCAGC ACGGGCAGCC ATGCTCTTCC CAGCACCCAG AAAAGGCCCA GGGCCCGGAC TCCTGGGTGT GGTCA TGAGA  
 AGCCCTCCG ATTCAGCCTC TTCTCTTCTT GTG

SEQ ID NO:1990: (Length of Sequence = 223 Nucleotides)

CTGCTTCATT TACCACCACC AGCCGATGGA CCAGTTTATT GGATTACCT ATGATACCAG GACTTTTCCA TTCAATTCAA  
 TTCAACAAAC TTTTAGAGAT CGCCCTATT CCAAGCTCAT CCAGGTTCTG CTTTCATGAAG GCAGGCTTTG GCATATCAGA  
 CATAAAAAGC TGGAGGAACT TGAGGATTCT TTTGTGGGTA AGTATATAAA GTGCATTCCC ACT

SEQ ID NO:1991: (Length of Sequence = 385 Nucleotides)

GCAGAGAAAG TGCCAGGCAT CAACCCAGT TTCGTGTTCC TGCAGCTCTA CCATTCCCCC TTCTTTGGCG ACGAGTCAAA  
 CAAGCCAATC CTGCTGCCCA ATGAGTCACA GTCCTTTGAG CGGTGGGTGC AGCTCCTCGA CCAGATCCCA TCATACGACA  
 CCCACAAGAT CGCGTCTCTG TATGTTGGAG AAGGCCAGAG CAACAGCGAG CTCGCCATCC TGTCCAATGA GCATGGCTCC  
 TACAGGTACA CGGAGTTCCT GACGGGCCCTG GCGCGGCTCA TCAGAGTGAA GGACTNCCAG CCGGACAAGG TGTACCTGGG  
 AGGCCTTGAC GTNTGTINGTT AGGACGGCCA GTTCAACTAC TNCINGCAG AGTACATCAT GGAAG

SEQ ID NO:1992: (Length of Sequence = 312 Nucleotides)

GGCTTACAGG ACAGAAAGGT CCCTTCTCAC AGTTTGGGAG GTCGAAGTC TGAAGTGAAG CTGTCAGCAG GGCCACACCC  
 CCTCTGGATG CTCAGGGGA GGGTCTTTG CCTCTCCAG TTCGTGGTGC TCCAGGCATT CCTTGCTTTA TGGTGGCATC  
 ATTCACTCTT GCTCGTCTT CACGTGGCCT TCTCTGTGTT GTCAAATCTC CTTCTCTGTT CTCTGTAAA AACACTCGTC  
 ATTGGGATTT AGGNCACC CCAATCTAGA TGGTCTCATC TTGAGCCTTT ACTTTAGTTA CCTCTGCAA GA

SEQ ID NO:1993: (Length of Sequence = 429 Nucleotides)

CTGTTTTTAC TCGACGAGGA GAAGACCTTT TCAATGTAT GGACATACAG CTCGTTGAAG CACTGTGTGG CTTCCAGAAG  
 CCAATATCTA CTCGTGACAA CGGAACCATC GTCATCACCT CTCATCCAGG TCAGATTGTC AAGCATGGAG ATATCAAGTG  
 TGTACTAAAT GAAGGCATGC CAATTTATCG TAGACCATAT GAAAAGGGTC GCCTAATCAT CGAATTTAAG GTAAACTTTC  
 CTGAGAAATGG CTTTCTCTCT CTTGATAAAC TGTCTTINCT GGAAAACTC CTACCCGAGA GGAAGGAAGG GAAGAGACTN  
 ATGAGATGGA CCAAGTAGAA CTGGTGGGAC TTTNGATCCC AATCAGGAAA GACGGCGNCA CTNCAATGGG GGAAGCATAT  
 GAGGGATGAT GGACCATCAT CCCAGAGGT

SEQ ID NO:1994: (Length of Sequence = 377 Nucleotides)

TGGGGTTGCC AAACCAAGTG CCCTGTCCT GTGTCAGCCA GCTGTGGCAA TTTCACCCCT ATTCCCTTGA GAGGCCAGCT  
 GCCTGCTGGA AGGAGTCAGA AGTCGGTGGA TGTCAATTGAG GCCTTGGAGG CCCCAATNTG GCGGGAGAGA AATCCACACC  
 TGTGCTTGA GTTCTCTCTC CTTGACCCCT TGAACCGCG CTTAAAATGC TGTCCCGCCT GGAACAGGGA GGCCACATCC  
 AGCAGTGGCT CCTCAATGTG CTGCCCCAGC CTGTGGGAAT CGTTTTTGT GCTTGATTTT TTGCTGGAGA TGTGGAAGGT  
 GATCATGCCA TCCCCATGA AGATATAAGA AACANCATAA CCATGGTTCAT CAGCAGG

SEQ ID NO:1995: (Length of Sequence = 341 Nucleotides)

GGACCTATAT GGCCATGCTC TGGTCTTACC CTTGGGAGGC CTGATCCCGG TGTGTGGGCC AGCTTGTTCG GCGGCTGGGA  
 TGCTGCATCT CCAGGCAACT ATGCACTTTC CCGGGGAGAG AACCAGTATG AGAAGTGGGG GCAGGGCACA CATTCATCTT  
 TGTACCTGCC TCTTTGGTTT GGACCTGGCC AGTCGGGTCA CTGCCTCCAC GTCTGAGGCC CCGCCAGCTG GCGTCTGTTC

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CTCGCCAGCC TCAGGCTGCT GCGCTCTCTC GGCTTTTACG GACCTCTGAG GCCGAAACCC CACCTCGAAG TTTCCCCGTG  
ACAGTGCCTC CGAGTCCACA T

SEQ ID NO:1996: (Length of Sequence = 316 Nucleotides)

GCATATGGTT GGTGAACAGT TTTGCAGCCC TAGGCTCCTG TACTGTGCGT GCACGCGCGC CCGGGCAGCC GCTGGCTCCA  
GCTCACGAAA CAGCCCCGGG CGCCGCGCG CTCTGAGTCC AGCCTCCTAC TGAGAACAGT CCCTCCCTTG TGCGGGTCGC  
ACGGCTAGCC GCAGGTTCCG CCACGTCAAA TCCATTTTNT AAAAAAGCAG GGAGCAGAGC TCTCTCTTCG CCGCCGACGC  
AGAAAGGAGC TNGGGAGGAA AAAGCTGCTG CCTTTTGCGC TGGAGATTCT TGGGCAAGGC TTCTCATTTT CCCAGG

SEQ ID NO:1997: (Length of Sequence = 320 Nucleotides)

GCAGGTTTAT GTTTTATTT ATGTATTTTA ACTGACTTAT TTGTGTATCC CACTAGAACA ATACATTAC AATATACTTG  
CAGAACTGTG CCTGGNGCAT CATGGGAGCA GAGAACTTGT CCAGTGAATA GTTGTGAAG AAAGNGTAA AATCTCCCCC  
AAACCTTAAA GGCATCCTTT TCGTAGTGTG TGTCCATAG GTATGGCTGC TGAGCACCAG GGCTGCTCAC CATGCTCCCA  
AGAAGCAGAG TCAGGGAGGC AGACAGCAGG GTTTATTAAG GTGCACANCC ATGTCTGAGC CCCAGCTCTC TCCGNTTCT

SEQ ID NO:1998: (Length of Sequence = 395 Nucleotides)

TTTGATGCTA TGGCGCTGGA CCCAGGGCCC TCCCAGGCCA TCTCTGTTC TCTGGGGTGG TCCAGTTCTA GAGTGGGAGA  
AAGGGAGTCA GGCGCATTGG GAATCGTGGT TCCAGTCTGG TTGCAGAATC TGCACATTG CCAAGAAAT TTCCCTGTTT  
GGAAAGTTTG CCCCAGCTTT CCGGGGCACA CCACCTTTTG TCCCAAGTGT CTGCGGTCG ACCAATCTGC CTGCCACACA  
TTGACCAAGC CAGACCCGGT TCACCCAGCT CGAGGATCCC AGGTGAAGA GTGGCCCTT GAGGCCCTGG AAAGACCAAT  
CACTGGACTT CTTCCCTTGA GAGTCAGAG TCANCCGTGA TTCTGCCTGC AACTTATCAT TGATCTGCAG TGATT

SEQ ID NO:1999: (Length of Sequence = 337 Nucleotides)

GAAAGTATTT GTGTGATTGA GTCACAGCT GAATCAATCT TCATATAATG CCATTTTTGC TTAAAGAAT GCCAGACTTG  
GGCATTAGGC TGACATTTTC TTGAAAACAG TGAGGCTTTG CTTTAGGGAA AATAGTGGTA GTATTTATGG TCGATGATAA  
AGTTCCTAGA TTTTAAGCAA AAATTTTAGA AAGCTGTAT CAGTCTGTGT AAGTATATAA TGAAATCTGT CATTATTTGA  
TTATCTGCAT AACTGAGTCA GTATTTCAA ATGATCAATG CATAGTATTA TAAAAATCAT ACATGGGTAA GAAATCTTTA  
CAAAGTGTCA GCTAGAC

SEQ ID NO:2000: (Length of Sequence = 329 Nucleotides)

ATGTAGCCCC CTGCTGCAA GGTGCCATCT TTTTNTCTGCT GTCACACAG CAGCGTGCTC AGGGCCTGCC TGCATGGCAG  
NNTCATCATG GGGAGCCCA CAGCCACTGA CATCATGAAG CCCACACGGA GCATCTCCGT CACCAGGTTG GAGGGAAAGT  
GCATGAGCAC GTTTGCCGGC CGTGGCCTCG GTGAAGCTGA CGTAGCCGAA AAACCCACC ATGACGTAGG AAGGTGGTGA  
CCACATTAAG GGAGGAAGCA AATATGGAGC TCATGGTTTT CACTTGACGG GCTCATCCAG GCTGTCGTAG GTGGGCAGCA  
CCTGGGACT

SEQ ID NO:2001: (Length of Sequence = 308 Nucleotides)

AAGTCTGGGG TTTGGTAGGC TCCCAGGATT TCCCTCAGCA GGCAATTGTG CTGCGCAGG GCGTCTGGG TGCCCGCAG  
GTCTCTCTGG ATGCTCTGTA GCTTCGGTG GAACGACTCC CTCAGTACT GTGTGGCAA GCTGAGCTCT GCCCTGACCC  
ATGTGGCAIT GGCCAGGATG GGGGCCANGC CCTGTGGGAT GCTTTGCTGC CGTNTCTG AGGCACGAC TGCTCTCTCT  
CCAGTGTCC CCAAGTGCTT CCTCAGAGAC TCAALCTGGN TCCAGAATC ACCATCCACT AGGACCTT

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SEQ ID NO:2002: (Length of Sequence = 242 Nucleotides)

AGCCAGGCC TGGGCCCAAG CCCCTTGTC CTCTCCACT GCCCCTCTT CCAGACAGTA AAGGCCATGG TCAGTGTGTT  
TTTCTCTGT AAACAAACCC CAGCTTGTTT AACAGAAATG CTAATAACCT ACTGGGAAAG ATGGAGGTCT AAATTACCTC  
CAGGGTTTTT CTGGGGGTTT ATCACCAGTG TGGGTCCCTT CTGATACCAC CAGGTTCACT CCAGGCAGAG TGGGGCGGAA  
GG

SEQ ID NO:2003: (Length of Sequence = 328 Nucleotides)

ATATTCTCAC TTATAAGTGG GAGCTAAATN ATGGGAACAC ATGGACGCAT AGAAGGNNAC ACTTTTACAC TNCITGGTGGG  
NGTGTAACCT AATACAACCA CTGTGGAAAA CAGTGTGGCG NTTCGTAAA GAACTAAAAG TAGATCTCCC GNTTGATCCA  
GCAATCCAC TACTGGGTAT CTACCCNNA GAAATAAGT CATTATACAA AAAAGATACT TGCACACAG TTTATAGCAG  
CACAATTG C AATTGCAAAA AATATGGGGC CAACCCAAAT GCCATCAAT CAATGAGTGG ATAAAGGAAA TGTGAGATAT  
ATATATAT

SEQ ID NO:2004: (Length of Sequence = 211 Nucleotides)

AGCCTTTTTA TTATTGNTT TTTTTTTTT TAANCGAAGG TCCCTTACTG GTCTGCTTC CATGAGTAGC CGTGACCAGG  
GGAAAAGGGA GAGGAACCAG CGGCACAGG GAGGGGTCAT CTCCACAACA TTCCATTAT ACACAGAACT AACAGACAA  
GCACAGNTC ACTATTGCGG TTAGAAGTTG GCAGCATGGG AAGGGGGAGG A

SEQ ID NO:2005: (Length of Sequence = 241 Nucleotides)

CCGGACACC GTGGGGAAGG GGTGCAGGTG GGTGTATGGC CAGAGGAATG ATGGGCTTTT NTTCTGAGGG GTGTCCGAGA  
GGCTGGTGT TGCACCTGCTC ACGGACCCCA TGTGGATCT TTCTCCCTTT CTCTCTCTCT TTTCTCTCTC ACATCTCCCC  
CATAGCACCC TGCCCTCATG GGACCTGCCC TCCCTCAGCC GTCAGCCATC AGCCATGGCC CTCCAGTGC CTCTAGCCC  
C

SEQ ID NO:2006: (Length of Sequence = 266 Nucleotides)

TTCCCCCTAA CCTTGTGAGT GGGCCTTTTA AGTAGTAAGT AGTATACACC TAGATATGGA TAGATAGCTA GGTGACCAAA  
CCTAATGGAT TAAGGCCATC CTGCGCTAGG TCACCTACTA AAGATCAGGT CATATGTCAT ATCGTTCCTG TGCITTTTAG  
AACGTATTG GGAATGGGT CCAGATTTT TTAAACACA TATTAAAGAT TATTTATATT ATGCTTTGTT TCGAAAGGT  
TTTAAGGTGG ATTAAATAT AAGATT

SEQ ID NO:2007: (Length of Sequence = 419 Nucleotides)

AGAAAGAGGC TTCCTTCTGC GGAGGCAGGT GGAGCACAGG GAGGGCTCCT GGGAGGCACA GGAGTGGGGT GGGGGCCAGG  
AAGGGGGAGG TGGACAGAGC GACTTGGATA AGGCTGGGCC GGGCCACGC CCACCTCAAG AGGGGGGCG CCTCTCAGG  
AGGNATCAAG GTGCAATCCA GTCTTCCTTT CTCTCCCTGA AGACCTGAGT TCCAGCCTTC ACAGAGCGTC ATGCGCATC  
TTCTTTCTGG ATGCTAACCC CAAATCCGAC ACTCAATGGT GCACCTCAGG TACCTGCCAA GNTCTINTGG GCCACATGG  
AAGGTGCAGG GTCTGGGTCC CTGGATGAG AGGTGAGGGG CAGATGGGTG ACCAGGGAAG GGCATGACCC AGAGCTNCCG  
GGACTCATGG AGGATTNG

SEQ ID NO:2008: (Length of Sequence = 360 Nucleotides)

CTTTCTGGA GAAAATAATA CGCTGTTCC TCTAATTAGC CCATCGGTTT CAGGTTCACT ACTCTGCTAT CTCTCTCTGG  
AGTTTACACA AGCCCTTCAG AGTGTAAACA CCGATGTGGA TTCAATCCCA CTCATTATTT TTTTCAATAA AAAGAAACT  
GTTTCAACAG ACAGGTGTTG TTTCCGACAT CATCAGAGAG GAAGGTGGAT GGTCTATAC GGTAAGCAIT CTACCCCTCA

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GCTGCCAGGG ACAGATCCAT AAAANTCCAA AAAGGGAAGA GAGAAACAGC TTGAGTACAG CTGAATCATT CACAACAATA  
TTACAAGCAA TTACTTCAAT GGTAAAGTCT CCAGTCTAGA

SEQ ID NO:2009: (Length of Sequence = 411 Nucleotides)

ATTACGGGCA CCTGCCACCA CGCCTGGCTA GTTTTGTAT TTTTAGTAGA GACGATGTTT CACCATGTTG ACCAGGCTGG  
TCTCGAACTC TTGACCTCAA GTGATCCACT CGCTTCGGCC TCCCAAAGTG CTGGGATTAT AGGCGTGAGC ACCTGTGCCC  
AGCCTCACAG CTGCATCTTA ACCTTACCTT TGCCTCTGCC TCTCAAGCTG GTACCTCCTA ATTTACATCC TAAGAGTGGA  
ACCATGTGAC AAGGACTGGA GTGCCATTGG CTGTGGACTG TTCAGGCAGG GAAGTACAAG ACCACTCTTG TATTCAGGGG  
CAACCAAAGG AGAGAATTAC GTACTTGTG AGTACAACT GCACCAAGCC CTGGAGACCC ATTACCACCG TTAACCCCTCA  
ATACAGCTCT G

SEQ ID NO:2010: (Length of Sequence = 311 Nucleotides)

AAGAAAGATG CCAGCTCTTT ATTACCAGGG AAGCTGTGTG CACGCGGTG GAGGGTNCCT NTGGAGCTGA CCGGGCCCTT  
ACCTTCTCCT GCTTGTGAGA GGTGAGTCCT GGTACCCAGC ACGGTGGCCT CCGGGAGGCT TTGATAGGTC AGCCTTTGCT  
GCCTCCAGC TCAGGGCTCC TCCAAGGAAC CTGCGGGGCC CATGTGCCC ACAGCCCGAG GAGGGAAGCA CCGACCGCCC  
TCCTGTGGC CAGTTGACAC ATCATCCATT TATTATCCTT CAGAGTCTAA AACTTCTCG TGATACAAG T

SEQ ID NO:2011: (Length of Sequence = 192 Nucleotides)

TCAGGACATT TCAGTGAGGC CACCTACAAG CAGAAAGGAG GCCAGGGCT AGGGACAGAN TGGCCCCAGA GCCAGTCAGC  
TGACGCAATT CTGTGTAGAA AGGGAGGGCA AGCTGCCAGA GCANTGNGC CCAATATGAT GCCTACACGA GACAGATGTC  
CCAGTAGAG TGTGTTCACT GACCTTCTAA AC

SEQ ID NO:2012: (Length of Sequence = 367 Nucleotides)

GGATGACCTT CGAGGACGTG TGCCGTACT TCACGGACAT CATCAAGTGC CGCGTGATCA ACACATCCCA CCTGAGCATC  
CACAAGAGT GGGAGGAGGC CCGGCTGCAT GGCGCCTGGA CGCTGCATGA GGACCCGCGA CAGAACCGG GTGGCGGCTG  
CATCAACCAC AAGGACACCT TCTCCAGAA CCCACAGTAC ATCTTCGAAG TCAAGAAGCC AGAAGATGAA GTCTGTATCT  
GCATCCAGCA GCGGCCAAG CGGTCTACGC GCCGGGAGGG CAAGGGTGAG AACCTGNGA TTGGCTTTGA CATCTACAAG  
GTGGAGGAGA ACCGCCAGTA CCGCATGCAC AGCCTTCAGC ACAAGGC

SEQ ID NO:2013: (Length of Sequence = 213 Nucleotides)

GATTTTATGG AAAAAAATTT CCATTTTNT TAAGAAATAA GGAGTTTNTG TGTCGAGGGC ATGACTACGA GAGGCTGGAA  
GCTTCCAACA GAGAATGCTG AACGANITCC CCCATGCCAT CGCATGCAG CACGNCAACC AGCCCGATGA GACCATCTTC  
CAGGCAGAAG CTCAGTATTT GCAGATATAT GCTGTGACTC CCATTCCAGA GAG

SEQ ID NO:2014: (Length of Sequence = 333 Nucleotides)

GTAAATAAA ACAGCAAATT CTAAATACA TTATGAGTAA AGAAAGATTA AAATAAGGNA ACAGTACTTA CTGTGCAACT  
TTAAATTATA CCAAGTAAAG TACACCACCT ATTCATGAT AACATTTTCC CTACGTTGAA AACACAAAAC CTACTTATCG  
ATATTTTGA TATTAAAAA AAGGACATTC ACTATTGTAG CCTGACAAC TCTTCCAGTA TTTTAAACCA TTCAGATGTA  
TTATGTGGN ATATTATTA ACATAATTIN GTTAAACACA TTTCTTCTA CACAACTGA ATTTTAAAG TGTCTATAAC  
ATTTTCAATT ACA

SEQ ID NO:2015: (Length of Sequence = 179 Nucleotides)

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NCACCACTTA TTGTCTTCAA ACATTATGTC ACTTTAACTT TCTTAATTG ACAAAGCATT CAAGAAACAT CTGCAGACTA  
GTTTTAACAG ACAAATAACA CCTGTAAGCA GACATGACTG TCCTAAATG TTTATTAAGA AAGTTAAAGN GCAATAATGT  
TTGAAGACAA TAAGTGGTG

SEQ ID NO:2016: (Length of Sequence = 293 Nucleotides)

TTTTCCCTCC CCAGAGATGC TTTATTACAT GGTTTCATCA GTCATCAATG ATGGGTCCCT ATGCCCATGC GAGGAGACAG  
GAACATCTGT GTGGTACATG GCACTGTTC CCTCTCAGCT ACGCAGTCAG ATGGGGGAG GGGGATGAAT GGGTGCCTGG  
CTTCCCTGCT GTTGGGAGAG CTCGAGATC TCAGCAGACA GAAATGAAAG CCTGGCAAAT AGGGAGGCAG GAATGTTCAA  
GCATCGGTGA CCTCCATGTT CTGCAGCCTG TTTCTAGGG TGACGTCTCT TTG

SEQ ID NO:2017: (Length of Sequence = 504 Nucleotides)

CGCGTCTGG CGCGCTGTG GCGCGCTGC TGTGCGNCCC CAGNCTCCTC GTGCGCCTGG ATATCTGTTC CAAAAACCCC  
TGCCACAACG GTGGTTTATG CGAGGAGATT TCCCAAGAAG TGCGAGGAGA TGCTTCCCTC TGTACACCT GCACGTGCCT  
TAAGGGCTAC GCGGGCAACC ACTGTGAGAC GAAATGTGTC GAGCCACTGG GCATGGAGAA TGGGAACATT GCCAACTCAC  
AGATCGCCGC CTCATCTGTG CGTGTGACCT TCTTNGNNT GCAGCATTGG GTCCCGGAGC TGGCCCGCT GAACCGCGCA  
GGCATGGTCA ATGCTGGACA ACCAGCATCA ATGACGATAA CCCCTGGTTC CAGGTGAAAT TNCINCGAG GGATNTGGGT  
AACANNNTT GTTACGAAGG GTGCCANCCG TTTGGCCAGT ATTGGTACCT AAAGGCTTTA AAGGTGGCCT ANAGCTTAAT  
TGGNAGGATN CGNTTNTCC ATGT

SEQ ID NO:2018: (Length of Sequence = 354 Nucleotides)

AGANCAGACC CACAGGCATG CAGAAAGGTA GGGCAGTATG TTTAANTCCA GACTTGGCAC ATGGCTAGGG ATACTGCTCA  
CTAGCTGTGG AGGTCCCTCAG GAGTGGAGAG AATGAGTAGG AGGGCAGAAG CTTCATTTT TTCCCTTCCT AAGACCTGT  
TATTTGINTT ATTTCCCTGCC TTTCGAGTC CTGCAGTGGG CTGCCCTGTA CCTGAACCT CATGAGCCTC TAAGGGAAAG  
GAGGAACAAT TAGGACGTGG CAATGAGACC TGGCAGGCA GAGTACAAGC CCAGCACCCA GTGTCCAGN CTTACTGGGT  
CCTTANCTG GGCCAAACAG GGAGGGCTGA TACC

SEQ ID NO:2019: (Length of Sequence = 295 Nucleotides)

GACACAACCT TTTGAACAT TGCTGCTGTT TTCAITTTAA AAAGGAACTT TTAATACTAA AATTATAGGA AGAACATAAT  
ATCTGACGTC ACGTAAATTC AGATTTGAAG GAAATTTACT TTTTNCCTT ATTTGINTT ATTTTTCCTC ATTTTGTAA  
GAACGAGCA ACACTTTGAA GAAAGCCAAA AGTTTACATC TGGAGCTGGA GGGTTCGTG ACTGCACACC AGGCACTCTG  
CCAGCCCTAC TTCTGCTGT AGTCTGCAG GTCACCTGCC AGAGGTGGTA CTTTC

SEQ ID NO:2020: (Length of Sequence = 217 Nucleotides)

ATTGGAACCT AAGTTTCACA AGGAAAGTGG TCACCTTAGT TCACCCTTT CCTTGTAAG CTTAAGTTC AATGGGAGAA  
TGACAGTAAA CAGACAACTA TTATAATAG TCCATGGAAG ATTTTGGTGT ATGTNAGATT TNCAAATCTG TAGAGAAACN  
TNGGCTCATT CAATAAAAAT TTGAAACCA TTGATTAATG TCTTAATAAC TATATGT

SEQ ID NO:2021: (Length of Sequence = 380 Nucleotides)

TTTTTCTTA AAACAACAGC AACGTGATCT TGGCTGCTG TCATGATG AAGTCCATGG TTGGGTCTTG TGAAGTCTGA  
GGTTTAACAG TTTGTGTCC TGGNGGATT TTCTTACAG TAACTTTGA GTTCTTCAA GTCCAGAGC CCGAGAATC  
GGCAAGAAG ATCAGGTCAG CCACTCCCTG GAGACACAGC CTTCTGGCTG GGGACTGACT TGGCCATGTT CTCAGCTGAG

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CCACGCGGCT NGTAGTGCAG CCTTCTGTGA CCCCCTINTG GTAAGTCCAG CCTTTCCAGG GCTGCTGAGG GCTGCCTCTT  
GACAGTGCAG TCTTATCGAG ACCCAACGGC TCAATCTGCT CATCCNTAAA GTGGGGGATA

SEQ ID NO:2022: (Length of Sequence = 223 Nucleotides)

GGTCACACAG CTAGTTGGTA GAGGAGCTCT TCCATAAGAT AGCAAGGCCA CATCACCTGC AGGGCAGTGC CTGCNCTGGG  
AGGTGGCACA ATGTGCCAAG TGATGACGAT GACAATAACT ATGAAAGGAT TTTATATTTG CACAGCATTT GGTGCGCTGA  
TCTTCGATGA GGAAGAGCTC CTGCGATGT CTGCTGAATT GTGCAGTAAA ATATTCAGGA TGG

SEQ ID NO:2023: (Length of Sequence = 294 Nucleotides)

TATTCTTAAG TTTGCACTTT ACAAACCAC AAGGGAGAAG TCCTTGAAGG GGAGACAGGG GTAGGGGATT AGGGAGTGGG  
GGATGGTAAA GAGGGGAAGA GGAAGACCCA GAAACGAAGT CCCCTCCAAC CCCATCTCGG GGACCAAGCA GAGACTAGGC  
CTCAGGCTAG CCCAGCAGGG TTCCTGTGTC CTGGTTGTAC AGAGCTAGGC CAAAAGACCT CAGGGGAAGG GCCATGGCCC  
TCTAGAGACT GCCGCCATTT GAGGGACAGC CACAGGCCAA TGTTTCCTGT GCCC

SEQ ID NO:2024: (Length of Sequence = 234 Nucleotides)

ATTTTGTGCG GGTTCGAAAC GTCTTCTGCG CTGAGCTGG GAGCTTCACC AGGCTTCGGT GTAGCGGACG TCCACTTCCT  
TCAAATTGGG AAGCTTGGCC TTCAGATCTT CGTAGGTGTC AGCTGAGAGC TINGTGCTGT TCATGTTTAA ACTGCAGAGA  
CTCTTCATGG AGCTCAGGGC CAGCAGGCCA GCGTCTGTAA CCGGGGTCTC GCACAGGTTT AGCACCTGGA GCAT

SEQ ID NO:2025: (Length of Sequence = 327 Nucleotides)

AGGAACAAAT GTTAAAGGGT AAGATAATTT CCTGCAAAA GGACACAGAA GGCAGTCTTA AGAAGATGAA TGGATGAGAG  
AAGGGAGAGA ATAAATGCA ATAACGAGCC AGCATTTACT ATGTATTTNN TCCTCACCTG TCTCTCCATA TTTAGGTCAC  
TTACCAATTT CTGTGCCCTT TTGGAGCTTT TMTGAGGGC TTCATTCTCA CCTGTATTT CTTTAGCCCT AAATTGACAC  
TCTCTCCAAA AATCCATTCC ATTGTCTGTG GACCNAGATG TTCTATGTAA TTCAGAAGCA GAACTCTTGG CTAAGGGCT  
AGTGTTG

SEQ ID NO:2026: (Length of Sequence = 328 Nucleotides)

TCAGTATAAA TTTAAAAGAA ACAGCTTAAT GAAATACAAG TCAGTTTATT TGATATTTCAG CCTACAGCTT TCCAAAGCAG  
CAGTTGAACA TGTTGTGAG TTTATACCAT TCATTCATTC ATTTATTTT NCTTCTTTC TTTAGAAAA TACTGGGTGT  
TTGATATTTG TTTCACTGTG CTAGTTTCTG GGAATGTGTA AGGAAGAGGC TGGCTGTGTG GATGAGAGCA ACTTGCTTTT  
TACAATAATT ATTTGTATT GTAAATTAAC AATTGCTCT TCTGGTATTA TATGGAAGTA TTTGATCCNG TTGATGGCAC  
TGCCCTTG

SEQ ID NO:2027: (Length of Sequence = 307 Nucleotides)

AAGAAAGATG CCAGCTCTTT ATTACCAGGG AAGCTGTGTG CACGCGGTG GAGGGTNCN TTGGAGCTGA CCGGGCCCTT  
ACCTTCTCCT GCTTGTGAGA GGTGAGTCTT GGTACCCAGC ACGGTGGCCT CCGGGAGGCT TTGATAGGTC AGCCTTTGCT  
GCCTCCAGC TCAGGGCTCC TCCAAGGAAC CTGCGGGGCC CCATGTGCCC ACAGCCCGAG GAGGGAAGCA CCGACCGNCC  
TCCTCGTGGC CAGTTGACAC ATCATCCATT TATTATCCTT CAGAGTCTAA AACTTTCCTC GTGATAC

SEQ ID NO:2028: (Length of Sequence = 272 Nucleotides)

ATCCATTCT GCATTAACT AGAGTTAAAA AGGAATATTG TTTATTTT GGCTCTCCCC ACTAGAAGTT TCACAGNGC  
ACAGATCATA TCTACCATTT GAACAGCTCT CTGCTGATG GCTAATACAT TINTTGGCAT ATAGTAGGTA GGTGCTCAAT

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AAATTTNTTA CAGGAATAAA TGAGATAGGA TTTTCAAGGG TATTNCTAT TAGGATTTAA TAAACAAAG TGATCTTTAG  
AGAAACAAAT CTCCCCATCA ACATGCTATA CT

SEQ ID NO:2029: (Length of Sequence = 261 Nucleotides)

ATTTCTACTA AAANTACAAA AAATTAGCCA GCGTGGTGG TTGTGCACCT ATAATCCCAA CTACTCGGA GGCTGAAGCA  
GGACAATGTC TTGAACCCAG GAGGTGGAGG CTGCAGTGGG CTGAGATCGC ACCATTGCAC TCCACCTTGG GCAACAAGAG  
GGAAACTCCG TCTCAAAAAA ACAAAACAAA ACAAAACAAA AACAAAAGTC AAGTGCTTAC ATTTTGCCAG AAGCCACAAA  
TGAAGACTGT GCCTTATAGG C

SEQ ID NO:2030: (Length of Sequence = 384 Nucleotides)

NNCCNNGGAC CAACAGCAGC CAGAGCAGTT AGCCAGTTAG TCCCCAGGCC TGTTGGCACAG GCGTTTCTGA CCTGCTGGGC  
CGAGAATGGG TAAGTTGTCT GGAGTCAGGT GGGCCACGT AGGACAGGGT CACAAAGCCT GGGTTTGTIT CTGGGTACTT  
TGCGCCTCTG GGGTGCTAGA GGTGGGGCAT GGTGGCTGGA AGTAAACTG CCAACTCTGG CCTCAGAAC TCTCAGGTAT  
AGAAGCCCAA GATGTCTAAT ACCCTNTCCC AGTGCCCGAG AGCTGCCCTG TGTCAGGTAG AGAGGACACT GTACCTGGGT  
GAATGATCAG ACCCTGGTAG CTAAGAAGGN ACTTGTCCTT TTAGTCAGTT TGCAGANCCC CTTT

SEQ ID NO:2031: (Length of Sequence = 261 Nucleotides)

ATCACAGAGG AGAAGCCACT GTTGCCAGGA CAGACGCTG AGGCGGCCAA GGAGGCTGAG TTAGCTGCCC GANTCCTCCT  
GGACCAGGA CAGACTCACT CTGTGGAGAC ACCATAGGCG TCINTCACTT TCACTGTCTA TGGCACCCCC AAACCCAAAC  
GCCAGCGAT CCTTACCTAC CAGGATGTGG GACTCACTA TAAATCTTGC TTCCAGCCAC TGTTTCAGTT CGAGGACATG  
CAGGAAATCA TTCAGAACTT T

SEQ ID NO:2032: (Length of Sequence = 344 Nucleotides)

CCCCTGCAG GCGTCTGGTT CITCGGGGAA AACGCTACC CACCCCTGGT AAAGGGCCTG CAGATCGAGC ATCCCGGGCC  
CCACCTCGAC CACGAGCAC CACAAGCCAG GTCACCCAG CAGAGGAAAA GGATGGACAC AGCCCCATGT CCAAAGGCTT  
AGTCAATGGA CTCAGGCAG GACCAATGGC CTGAGTTCC AAGGGCAGCT CTGGTGCCCC TGTATATGTG GNTCTCGCT  
ACATCCCGAA TCAITGCAGT GGCAAGACTG CTGACCTTGA CTTCTTCCGT CGAGTGGCTG CATCCTACTA TGTGGTCACT  
GGGAATGACC CTGCCAATGG CGAG

SEQ ID NO:2033: (Length of Sequence = 373 Nucleotides)

GGAAGAAAGA AAGAAAGAAA GAAAGAAAGA AAGAAAATGG CCCCATAGTG CTTAAGTCTT CAGACATGTG TCCTGGTGCT  
GGGGACAGGG CTTCTGACAT TCTCTCAGGT CAGTATTGTC AGGTCAATCA CCTTCGACTT CAACACATGT GACCAGAAAC  
CTTCCCAAGG CAGCCATCCA CTTTGCTGTC CCTCCGACGG CCATGGCTGA CCACTGCTGC TGCTGTGTAT CCTCGGTGAC  
ATCTGGCCTT GGCAGCCTAT GGATTNTGTC CATTCTCCTG GCATGAAATC ACTCCTTCTT GTTGTITTTAA TTTGCATTTC  
TTCAGTTACC AGCGCAGTTG AGCATCTTTT CATACTTA CTGACCATTT CTA

SEQ ID NO:2034: (Length of Sequence = 289 Nucleotides)

CCACCAAGA ACATCAGCT GTCTTATGTC AAATGCTCGA CAATACCTCT CAGTAGGACG TTGTTGCAAG GCTAGCTAAT  
TTTAAATCTG GTATGAGTAA TACAGTCAAA CCTAGTATGT ATGCGAGAAA GTGTTGCTA ACGCATGGTG AGAGGATGTG  
ACGTACAGC ATGAGCAGTC CCTGGTTGTC CCATTGTGAG ATAAAGGTAG TNNAGTAGN CCAAGTITCT ATTCGAGGTC  
TCTGAACCCC AAAGCCAGGC CTTTCACTTT TGCTGGGTGG CCTGGAAGC

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SEQ ID NO:2035: (Length of Sequence = 290 Nucleotides)

CTTTTCCTTC ATCTGAACAC AGAAGGAGCC ACGGTCTGGA AAGTNTGCCT GTCCTTCCCG GGAGTGGGGA GGCCGGTGTG  
 AGTTTGTATC TTCCAGCTCA GGCAGACACC TTACACAGTG CAAACAAGAG CCGTGTCAAG ATGAGAGGGA AGCGTAGACC  
 GCAGACCCGT GCAGCTAGGC GGCTGGCTGC TCAGGAGTCC AGCGAGGCTG AGGACATGAG CGTCCCCAGA GGACCCATTT  
 GCACANTGGG CTGATGGCGC CATTTCCCCA AATNGCCATC GGCACCAGCT

SEQ ID NO:2036: (Length of Sequence = 241 Nucleotides)

TTATTTTATA TAAAAAGTGT TTCTGTGATT CTCCAGAGCC CAGGAGTCAG TNCTGGTGGT TGGAGGGACC TGCCCCACT  
 GGTTTATTTA ACCCTCTGTG TCGGTGCCCT NAGAACCTCA GCCAGAAAGG CAAGGAGGAA ATCAGAGCAN GAGCCTCATA  
 CTCTGGTGA TCTATTCAIT CTNTGACCTC AGGGGTGACA TATAAGGTCA GTGTTTCTCG TCCCCGNCGG ATCTGCACTG  
 C

SEQ ID NO:2037: (Length of Sequence = 270 Nucleotides)

CTATTATTTT GCATTTTGG TAGAAGGGGT GGTCTCACCA TGTCGCCCAG GCGGTCTCG AACTCCTGAG CTCAAGCGGT  
 CCACCTGCCT CAGCCTCCCA AAGTGTGCG ATTACAGGCT TGAGCCACTG CACCTGCCC AACCTTGACT ACTTCTAATA  
 GGGATGAGTC GAGTAGCAGT TNGGGGCGTC CTGTGCGGCT GGGTCTGCCT GAGGCTCCCC TCGGCCCCGT CCATGGCTTG  
 TTGTGCATCT GGCCCTGAGT GCCTTGGCCC

SEQ ID NO:2038: (Length of Sequence = 151 Nucleotides)

ATTTTAAATT GAGCATTAG GGAATGCAGC ATTTAAATCA GAACTCTGCC AATGCTTTTN TCTAGAGGCG TGTTGCCATT  
 TTTTNTTAT ATGAAATINC TGTCCCAAGA AAGGCAGGAT TACATCTTTT TTTTTTTTTT TAGCAGTTTG G

SEQ ID NO:2039: (Length of Sequence = 166 Nucleotides)

TTTGTCTGTT ACAACCTCCG TATGACGCCA CGCCACCCGC TGTTCAAGTC CCGTGGGCTT CCTGCACAGN CCACACGCTG  
 CGCCCGGAAG GCCCCTGCTG TGGAGAAGCC GGACCCATCC CCGAGGTCCC CAGCGAGGAC ACANACTCCA CGAGAGCAGC  
 CCTTCC

SEQ ID NO:2040: (Length of Sequence = 362 Nucleotides)

GAAGTACGGT TAAAATTAGA TTGACCATA TGAAGATCT TTTACCAGTT GGTCTCCAAG AATGTCTTCC TTATTATGTT  
 ATTGGTCAIT TTTGAGCGTG TGTGTGGTG GGGTGGTTTC TGCCTTATAT TCCTTAACTA CATTGTATAT TTTTGTAAAG  
 AATTGGGAAT TCATTTTAAT GCTTTTAAAC ATCTTCACAG GGAAGTGGAA TAAAGTTAAT CTTGACTCTG TACCTTGAGC  
 CATTGTCAAA GTCAGGGGTT ACATTTTAGG TATCTAAAAA TTACTCTTTA ACTTTCACAT TCCCTGGGTT AGGAAGCTGC  
 TGTTCAGGAG AAATTTTCCN GGTTCCTCTG GCAATTGGCT TA

SEQ ID NO:2041: (Length of Sequence = 360 Nucleotides)

CCTAATTGTA AGTATGAAG TCGAGGAGGT GCGTGATAAT GGGCCAAGTG AGGATGCAAT GCACCAGGTG TATAAGTAGC  
 TGCAGTCACT CCAGCTTCAA TTCCAGTTT CCAGGCAGAC CTCTCTGGAG CCTGTGAGG ATGTNAGGAC ATAGTCTGAG  
 GCACATGAAT ATGATGCCCA TGACCATAGT TTGGGTGCAT CCTATGTGGA TGGGGTGGG GCGGTTCATG TGCCCGCNTT  
 GGAAGCTGCA TCATCTCTCT CCTTTGAAGT TCCATCTCT GCATCACTTC ATGAGGATGC AGTCTCTGTA CTGGAGGTGC  
 TGTGGCTGGA ATATGGTGG AAATGGCTG GTGTGTAGGA

SEQ ID NO:2042: (Length of Sequence = 403 Nucleotides)



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GTTATTGTTG TTGAGATGG AGTTTCACTT TTNTTGCCCA GGCTGGAGTG CAGTAGCATG ATCTCAGCTC ACTGCAACCT  
 CTGCTCCCG GGCCCAAGCG ATCTCTCTCC CTCAGCTCC TGAATAGCTG GGACTACAGG TGCCCAACAG CACACCCGGC  
 CAATTGTTGT ATTTCTAGTA GAGATGGGGC TTCTTCACGT TGGCCAGGCT GGTCTCGAAC TCCTGACCCC AGGCGATTCC  
 CCCACCTCAG CCTCCAAAAG CGCTAGGACC ACAGGCGTGA ACCACTGCGC CCAGTCGGAA GTAATAGTTA TTAACCAATG  
 TGATGGCCCG GTGTAGGGAC CCTCGCTGT AATCCCAGCA CTTTGGGAGG CCAAGGAGG AGGACCGCCC GNGACCAAGA  
 GTT

SEQ ID NO:2043: (Length of Sequence = 331 Nucleotides)

CCCCGTACGG TGTGGCTCTC AGCAGCCTCA CCACAGGCAC CGCAGCTTTC CCGCTGTGCA CCCAGCTGGG TGTGTGAATC  
 CCCCCTGGACT GCGCCCAAGC CACCTTCATC TCCCATGACA AGATGGTCAT CTCCTCAAG GGCAGTCAGA TCTACATGCT  
 GACCTTCATC ACCGATGGCA TGCGTAGGTT CCGAGTGTTC CACTTTTGAC AAGGCGGCCA CCAGCGTCCT CACCACCAGC  
 ATGGTCACCA TGGAGCCTGG GTACCTGTTC CTGAGTCTT GCCTGGGCAA NICTCTCTC CTCAAGTACA CCGAGAAGCT  
 TCAGGAGCCC C

SEQ ID NO:2044: (Length of Sequence = 244 Nucleotides)

ATGGAAGATA CTAAGAGCCT CAGTCTGGAA GCATTACCT AGGAAGCGCA TATAGACAGA GAAGATCAAG GACTGAGGCC  
 TGAGACAGTC AGCACTTAA GGTGAGGGG AGAAGTGCCA AGGAGACAAG GTGAGAACAG CAGAAGAGTA GCCAAGGCCC  
 AGGATGTTGC CACAGAAGCC AGGAGAGGTG AGCATGAAA CAGAGGAGGA CCAGCTGCTG GGACAGAAGA GCCATATGGA  
 AGAG

SEQ ID NO:2045: (Length of Sequence = 333 Nucleotides)

GTCAGGGATT TGTCCATTCT GCTCTTGGCC TCTCTGAGG CCTCATAATG GGAGACCAA TCAAAAATGT CCCATGTCAC  
 TTGAGTGGGT AACTGCCTA CAGAACCTTG AGGTGACTC CTGCTCAGT TCTCAGCTGT TTACCACAGC CCTCCAGGGT  
 CCAAGATTG AGGAGCTTTC TCTTCTCTGG GAGGAACGT CTCANATTTA GCTTGTGTGT GTTTTGGACA GAGGCTCCAC  
 AGCGGTGGCT CTTGAGGAAT CCTCACCAGT TTGTTCTCTT CCCTCTGACA AGCAGCACCT GAGCAGATGC TGAGGCAGTT  
 CATTAACCA GGG

SEQ ID NO:2046: (Length of Sequence = 274 Nucleotides)

GCAGGTTTAT GTTTTATTT ATGTATTNA ACTGACTTAT TTGTTATCC CACTAGAACA ATACATTAC AATATACTTG  
 CAGAACTGTG CTGNGCAT CATGGAGCA GAGAACTTGT CCAGTGAATA GTTGTGAAG AAAGGAGTAA AATCTCCCC  
 AAACCTAAA GGCATCTTT TGTAGTGTG TGTCCATAG GTATGGCTGC TGAGCACCAG GGCTGCTCAC CATGCTCCCA  
 AGAAGCAGAG TCAGGGAGGC AGACAGCAGG GTTT

SEQ ID NO:2047: (Length of Sequence = 327 Nucleotides)

GGCCGCGATG TGCTTTTTC CTGTTTTCG TGCCCGGAT GCGGAATCTT GAGCTCGGT GTCCGGTTAC AGAGTTGTCC  
 TGGTGACGGG ATGCGGAGGT TTCTCTCTT TTGTTGTGG GCGGCTGGT GGCAGGGGCA GCTGGTGGCA GGGTTGCCCA  
 CGCTAATCTC CGAGTCTCTA AGGGCACCGT CTTCTCTGGA TCCCTCTTGC GCCTCGTCCA TAAAGGCAGA CCCGCGGGCG  
 CGCGCGGGCA ACCTGAAATC AGAGCAGGCG TCCGTGGCGC TCAGGAACCT TGCTGAGCTT CGCGATCTT TCATTGTTGC  
 TTCATTT

SEQ ID NO:2048: (Length of Sequence = 241 Nucleotides)

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ACTTTGTGTG TCTGATTTTA GGA CTCTGGC TGGCCATGTG CTNNNGTTG CCTCTCCTGC ATTINCCACT GGATTTCAC  
TGCATCGTTT GGAGATACAA AGCGAGCAGT TCTTGGTCAG AACCTCCTC TGCTTTTCAT TGTGTTTGAT AATGGTTACT  
GGGTCCITCT CTCAAGGGTA GCAAGGCCAA GCTGATGGCT GCTTGTITAG GAGGCCATCA GTTCCTTCCT GTGGAGAAGG  
G

SEQ ID NO:2049: (Length of Sequence = 269 Nucleotides)

ATTTTITAGTA GAGACAGGT TTCACCATGT TGGCCAGGCT GGTCTCAAAC TCCTGGCCTC AAGTGAGCCA CCTGCTTTGG  
CCTCCCAAAG TGTGAGATT ACAGGTGAGA TATTCTATAT TCATGGATTG AAAGACTCAA TATTGTTAAG ATGTCAGTNC  
TTTCTAAAGN GATTTTITAG ATGCAACACA ATTCCAATCA AAATCCAGG NTTTTTTTGT AGCTATCAAT TGATAGATAT  
CAACAGCCAG CTGATTCTCA AATTACGT

SEQ ID NO:2050: (Length of Sequence = 170 Nucleotides)

TTTTGAAGAG AACGTCAGTT TAATAAGCT AAATGGGAG AATTGAAGTT TGCATTTGAC ATGGTATTAA ACAAACCAA  
AGGGCTGAAA CTCATGTTTA GACAACACAG GTCCTAGTC ACTAGGCAA GAAACAGTC CACAGCAGGT GGCACAAATA  
ATTCCTATAC

SEQ ID NO:2051: (Length of Sequence = 262 Nucleotides)

CAGGACAC GCAGGACCAC TGTGGATTAG AAACCCACAC GTGTCACTCG CAACATTCCT CCCACATCCA CATCCACGAC  
GGAGCCAAAT CTCATTGTG ACCCTCAGTC ACCACCCAC AAGATGGAGC CGCTGGTTAC GACATGGATG ACAGGTGTCA  
TGCACAGGGA GAGAAATTNT CCCCAGATAC CCTGAGGAC CAAGGACCAC CCCCAGGCTA GGGTGGGAGG ATTGAGAGCA  
GTGCAAGAAA CCAAGGAGGA TN

SEQ ID NO:2052: (Length of Sequence = 325 Nucleotides)

GAAAAAGAT TGTTTTGTTA GAAAAAGCAA AAACAAAAA GCATTAGAAA GTGGGAGCCA CTGCACAGCA GTAGCCTAGA  
GACTGGCTGC GATATGGTAG CTCTGCCTTG ATATCATCTT CGTGCTTCA GGCATAGAGA AATGGCAGAG GAGCAGTAAG  
ACCCACAGG AGATGGCCAG AGGNTCCACC ATCAGCCTTC TGGGGACTGA GGAGGTGATC TTAGTGAAT TATTTTATAC  
TCACCTCCCC CGGGGTTTITAG TCCTTCCTCC AAACACTTAG TTCCAGGGCG CAGGAGACCT GTTACTAGCA CTGTATGTTT  
CTTTG

SEQ ID NO:2053: (Length of Sequence = 222 Nucleotides)

TTTCAAAATT AGTCTTAAGA GTATAAGCTG TTTTINAGGG CTGTAGCCAG ACTACATAAT GAGCGGTGAA AGCGGCTGCC  
TTCCCTCTC CTGACACCAG CAAGGGGGAG GCACCATCAC CGGCCCTGCC CCATCATGCA TCCAATGATT ACTAGCACTA  
GANGCCAACG GCAAAGGNC CCGCGCGCTT GCTCGTGTIT AATCCAGGTT AAGCTATACA CG

SEQ ID NO:2054: (Length of Sequence = 341 Nucleotides)

GTAAATTAAG AATATGGCCC CAGAGTTTIG TTTATCTGGG GTCTGAGCAT AGATTTTATA TTCTCTGTTG CGTTTTTTAA  
ATCTAACTTT CTGTCTCAA TGGAGAGAGA ACAGGGAGGA TACAGAAGTA TIGCAGCCCA GATCCCTAT CAGGGGGACA  
GCTGTGGGGC AAAGCAGCCA CCCCACAGCC TTGTGGCTAG AGTACAGTGG GGTGGACCCT CCAGCCCCAA TAGCCCTAGT  
ACCCAGCTGG CAGGGTTGCC CACCCCTGCT GTCCACCTGC TCCATCTCT AGGGGTTCCA CAGGCCCTG ACCGCACAGG  
GAGGCTGGGG CCAGCCTGGT C

SEQ ID NO:2055: (Length of Sequence = 258 Nucleotides)

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CTGCCCTCAGC CTCCCAAGTA GCTGGCATT A CAGGCGCCCA CCACCACACC TGGCTAATTT TTGTATTTTT AGTAGAGACG  
 AGGTTTCACT ATGTTGGCCA GGCTGGTCTT GAATTTCTGA CCTTGIGATC CGCCTGCCTC GGCTCCCAA AGTGTGGGG  
 ATTACAGGCG TGAGCACCAC GCGCGGCCAA CTGTCTTTTC TCTAATGGCT GGCGATGTTA ATTTTTTCAC TGGCTTATTT  
 ACCGTCCTCT TCTGTGGA

SEQ ID NO:2056: (Length of Sequence = 292 Nucleotides)

CTCTTGACTC CGAAGGCTGG TGACAGACAC ATAAGGCAGC TCAAACTCTT GCAACTTCOG TACAAAAGAA AAGGCTCCAT  
 CCTCTTTTTT TCGAAGTAAG AATAGACTAA AGTATCCAAT CAAGTCATCT GGAAGATCCA GCTTTGCAGC TACAGCCTCC  
 AGGACATCCT CAGTCTGATC TGAAGTTAGC ACGTTGACCA GAACTTTCTG CCCGTTGCTG AGCAGCACTT CCAAGGACAC  
 TTCTCTGTG GGGACCTGCT GTGTCTCTG TTGTGCCCGA CGCAGGAAAC TG

SEQ ID NO:2057: (Length of Sequence = 293 Nucleotides)

CCAAAAACT TGGGTGCCTG AAGGTGGGGT TTTGATCATG GCCAGGCTTC AAATTTAGGT CAGGCTCTGG TGGTACATCC  
 TTATATGCTT GGTGCTCAGC ACAGGTCAAG ACACACAATA GACCTCAAT AAATATTTGC TGAATTTGAA CAATCTCTGT  
 AAAAATCTCA TTAAGAGACA TCAGCTTGGG ACACAGTTCC TCTCTTACTG TTCTTCTCC CAGAAGCTCC TGGAAATGAGC  
 AGGTCTGGCG GCAGGGGGCA CACAGGGCTG CTGCTCAAT CGGAGAATGG CAC

SEQ ID NO:2058: (Length of Sequence = 172 Nucleotides)

CTTCTACAGT CAAGGAGCTC AAGCTCGCCG GCGACCCCTG CTCTGCCTC CCACATTAAT GCGGCATCC TCGGAGGATG  
 ATATAGACCG GCGGCCCATC CGGAGAGTGC GCTCCAAGAG CGACANGCCG TACCTCGCAG AGGCCAGGTT CTCCTTTAAC  
 CTGGGGGCAG CT

SEQ ID NO:2059: (Length of Sequence = 245 Nucleotides)

GCAAGANGGC CGAGGGGGCC CAGAACCAGG GCAAGAAGGC CGAGGGTGCT CAGAACCAGG GCAAAAAAGT AGAAGGGGCC  
 CAGAACCAGG GCAAGANGGC TNAGGGGGCC CAGAACCAGG GCAAGANGGC CGAGGGGTCT CAGAACCAGG GCAAAAAGGC  
 CGNGGGAGCC CAGAACCAGG GCCAAAAAGG AGAGGGAGCC CAGANTCAGG GTAAAANGAC AGAAGGGGCT CAGGGCAAAA  
 AGGCA

SEQ ID NO:2060: (Length of Sequence = 318 Nucleotides)

ATGCCCTGTT AAGGAGCTTG GGCTTGATCC TCTAGGCAGG GAGCCGTTGG AGGATTTAAG CCAGGGAGTG CTGCGGTTGG  
 TCACACTCGC CATTTATGTA GATCGTTTTG GCAGCCAGGG GAAGGATGGA TTNAGGGGG ATGAGATTAG AAAGCTGGGA  
 TATGAGTTAG GAGGCTGAAA GATGGTTGAT AAAAATNATC GTTGGGCAGC CGAGATAACT GACTTCAAGG ACATATACTG  
 GACTTATAGC AGAGCCTGTT GAGTCTTGCT TTTGCACACA GTTCAAATAA TCACCTAGTC ATGTGGTTTA TCTTGCCA

SEQ ID NO:2061: (Length of Sequence = 331 Nucleotides)

AAAAATAAAA ATCTATAAAC TACGATCAT AAGCAACTCC TGTTCCTG TGTTTCACCA CATCTCCAG AACTGAACT  
 TTGCTCATA AAAATTACAT AGAATGTAAA CTAATTCATT TTTTAAAGTA AATGCAAAAC TAAGGGTTAC ACAAGCACTG  
 AGCATCAACA CTGACAGAA ATTAATTCTG AAGCCCAITA ACTTTGACAA ACGTTTATTC ATCTTTGCCT TCTTGAAGCG  
 TGTGACTATC CCAGTTTTAC AGGAAAAGCT TAAACAGAAA AAGTTAAATA ATAATCTCAA GGTAGNAAA CTAAGACATA  
 ATTCTAGCT

SEQ ID NO:2062: (Length of Sequence = 316 Nucleotides)

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CTAAAATCAA CCACATAATT GGACATAAAA GAATCTTCAG CAAATACAAA AGAACCAAAA TCATAACAAA CACACTCTAG  
 GGCCACTGCA CAATAAAAAT ACAAGTCAAG ACTAAGAAGA TCACTCAAAA CAATGCAATT ACATGGAAAT TAAGCAACAT  
 ACTCTCAAAA TGACTTTTGG GTAAATAATA AAATTAAGGC AGAAATAAAG AAGCTCTTTG AACTAATGA GAAGAAAGAT  
 ACAACGTATC AGAAACTCTG GGGTACAGCT AAGGCAGTGA TAAGAGGAAA ATTCTTAGCA CTAAATGCTC ACATTG

SEQ ID NO:2063: (Length of Sequence = 312 Nucleotides)

ATCCATGGCT TTAGCAAGAT CCCAGTGTG GAACTCTCCT AGCAACTTGT NTTCATCCAG TGATACTGGT TCTNTGGGGG  
 GCACTTACAG GCAGAAGTCC ATGCCCGAAG TGTGGAGTG AGCGTAGAT CCCAGCCTC CACTGACAGG CAGAACACCC  
 AGTCAGATAT TGGTGGCAGC GGAATATCCA CGCTAGCTG GCAAAGAAGT GAGGATAGCA TTGCTGACCA GATGGCTTAC  
 AGTTATAGAG GACCTCAGGA TTTCAATTCT TTTGTCCTCG AGCAGCATGA ATATACAGAG CCAACATGCC AT

SEQ ID NO:2064: (Length of Sequence = 294 Nucleotides)

TACCTAAAGA ATCCTCAGAT GGGAGACCCA GCCAGTTTGG NTCACAAATT AGCAGAAGTC AGCCAAAATA TAGAGAACT  
 GCGAGTAGAG ACCCAGAAAT TTGAGGCCCTG GCTGGCTGAG GTTGAAGGCC GGCTCCACG ACACAGCGAG CAGGCGCGCC  
 GGCAGAGCGG ACTGTACGAC AGCCAGAAC CACCCACAGT CAACAACINC GNCCAGGACC GTGAGAGCCC AGATGGCAGT  
 TACACAGAGG AGCAGAGTCA GGAGAGTINAG ATGAAGGTGC TGGCCACGGA TTTT

SEQ ID NO:2065: (Length of Sequence = 331 Nucleotides)

GAGCTGAGTT TCACCGTGT GCGCAGGCTG GTCTCGAAGT CCGGTCTCA AGTGATCCTC CTACCTCAGC CTCCCAAAGC  
 ACTGGGATTA CAGGTGTAAA TCACTGTGCC CAACCTGCTC AACTCTTTGG AGAGAAGCAA GTCTTCTAGC TGAACGTGAT  
 AATGGCCTCA AAAGCAGTGT TGACAGCAGA TAATCTTCAC ACAGACAAAT GTCTACAGTT TCTAAATAAG CCAACTGTGC  
 ATATGGCCTA CAGGCTCTTC AGCATAACCT ACCCAAAGCT CAGGTTCCTT GAAGGCCAGG ACAGTACCTC GGGCCTTCAA  
 GCAGCATTTG G

SEQ ID NO:2066: (Length of Sequence = 321 Nucleotides)

GTCTTGANCT CCTGACCTCA GGTGATCCAC CANCTCGGC CTCCCAAAGT GCTGGGATTA CAGGCGTGAG CAACCGCACC  
 TGGCCTTGAA CCGTTTGAAG TATGATGCA AAAACAAGTG GTGAGCTATG GCCAAATTG CAATTCAAAA AGATCCAAGA  
 AAGCAAGTIG AACATCCTGA TTGGAGATGG GACACACCCA AACGTGTGTC TTGAGGTGGC TGCAAAGTCC TCCGGTCTGA  
 GCCAGTNTAA GCAGGTTTTA CCCAGCCCA TGATTTAGAG AGATGTTNAG TGCAGATCCT GAGCTCAGCA GAGAGCAACA  
 T

SEQ ID NO:2067: (Length of Sequence = 335 Nucleotides)

CTGGCTCTGT GGCTCAGGCT GGAATGCAGT GGGCCGAGGT TGGCTCACTG CAACCTCCAC CTCCTGATCT CAAGNCGTCC  
 TCCACCTCA GCCTCTCAAG TAGCTGGAAC TACAGTGGAA CTACAGGTGG ACAACATCAC ACCCAGCTAA TTTTNTINAT  
 TTTTGTAGA GACGGGGTTT CACCTGTG CCGAGGCTGG TCTCAAATC CTGAGCTCAA GCAATCTGCC CACCTAAGCC  
 TCTCAAAGTG CTGGCATTAC AGGCATGAGC CACCTGCTT GGCCTGGGAA GCTCTTTTAA CAGAGGTGAT GTAAAGTAGA  
 AAAAGCAGTG GGCTC

SEQ ID NO:2068: (Length of Sequence = 274 Nucleotides)

GCAACGAAT GGACAGGTA AAGAAGGAAT GGAAGAGGC AGAGCTTCAA GCTAAGAACC TCCCAAAGC AGAGAGGCTAG  
 ACTCTGATTC AGCACTTCCA AGCCATGGTT AAAGCTTTAG AGAAGGAAGC AGCCAGTGAG AAGCAGCAGC TNGTGGAGAC

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CCACCTGGCC CGAGTGAAG CTATGCTGAA TGACGGCGT CGGATGGCTC TNGAGAACTA CCTGGCTGCC TTGCANTATG  
ACCCGCCACG GGCTNATCGN ATTCTNCAGG GCTT

SEQ ID NO:2069: (Length of Sequence = 321 Nucleotides)

GTGCCATCTG TTTACTTCTC AAATGAAAA GAATTCAGGT CTGAGTGTC AGGAAAGGGG GTGAATTTCA TAACCGCCTG  
TGACAGCGAT GGAAGGAGC CACACCCCTC CAGAGGGTAC CACCCAGCG ACAAGTGGG AGGAGGAAGT AGCTGGCATG  
AAGCCGGCCC ACCCAACCTC CGGGAGAGAG GAAAGGAGA ACACGGGATG AGGAGGCTTT AAATAGTATT TCATAAAATA  
AAAATGCCCA GCACTCTTAG GAACCTCTCA TTCAACCGCC TAGTTTTTGT TTAAATAATT CTAATGCCAG AGCTGGGGGG  
C

SEQ ID NO:2070: (Length of Sequence = 161 Nucleotides)

AAAGCTGCAT AAAACAAGTT TAATTTCCAA CCAGGGTCAC AGTCATCGG TTATCCACA TTTGAGCAA GGATAGAGAA  
GGTGAGTTAT TAAACATATA CAGTCTACAT TCCAGAGGAG GAACTGCAGT TACCACTATA ACACCACAGA CAAACTTTGG  
G

SEQ ID NO:2071: (Length of Sequence = 288 Nucleotides)

GTGGAAGGGC CTTCATACAT GCTTCCATC TTCAGGAACA TCAGAGAATT CATACTGGG AGAAACCATT CAAATGTGAT  
ACATGTGGTA AGAACTCCG TCGTAGATCA GCACCTAATA ATCATTGCAT GGTCACACA GGAGAGAAAC CATACAAATG  
TGAGGNCITG GTAAGTGT TCACTGTAG CTCAAACCTT CGTATCCATC AAAGGGTCCA CACAGGAGAG AAACCTTACA  
AGTGTGAAGA ATGTGGTAAG TGCTTTATTC AGCCTTCACA ATTTCAGG

SEQ ID NO:2072: (Length of Sequence = 284 Nucleotides)

TCTGTCTTC AGACCCCTTT GCGTATGT CCTCCTAAC TGGGACCTAA GCTAAGACTC AAGGGCTGCT CCCATGCCCT  
TCAGTATCCC CCATAAATC TAACTACACA TTAGAACTC AAAGAATAGC ATAGGCATGA TCCATCACCT GCAACAGAAG  
CAGTGAGGAG ACITAAGCCA GGGTCTCNC AAGGATTC ACAGACCTT CTGCACTC TGNATGCCG ACTCCTAAGC  
ATTTACTCAG ATTTTAAACA GCACATAATG CCATGGCGAG GATG

SEQ ID NO:2073: (Length of Sequence = 270 Nucleotides)

GGAGCGATAC GCCCCTGTCG CGAAGGACCT GCGTCTAGA GATGTGGTGT CTGGTCCAT GACTCTGGAG ATCCGAGAAG  
GAAGAGGCTG TGGCCCTGAG AAAGATCAG TCTACCTGCA GCTGCACCAC CTACCTCCAG AGCAGCTGGC CACGCGCCTG  
CCTGGCATTT NANAGACAGC CATGATCTC GCTGGCGTGG ACGTACGAA GGAGCGGATC CTGTCTCTCC CCACCGTGCA  
TTATAACATG GCGGCAATC CCACCAACTA

SEQ ID NO:2074: (Length of Sequence = 278 Nucleotides)

GCACATGCCA TCAGTCTGG CTAATTTTG TATTTTATG AGAGACGGG TTTCGCCATG TTGGCCAGG TGGTCTCGAT  
CTCCTGACCT CAGCTGATCT GCCACCTCG GCTCCCAA GTGCTGCGAT TATAGACAGG AGCCACGNC CCGACCCCTC  
TCTCACTTCT CAAATCTCT TCTTTTCC ACCTCTAGG TGCAAGAC AGTGGATGT CTCTGAGGT CAAAACCAAG  
CTGACCGGT AAGTATTTAC AGCAAAGCAT CCAATGGG

SEQ ID NO:2075: (Length of Sequence = 232 Nucleotides)

GTCTCTAGGA TCACTCAA CCCAGATCA CGTTTTGTA ATGTTATCAA GGCATGATT TGGATTTCAG AGCTGGCCCA  
GTGAACAACA AGCAATCAAG CATTCCTTC TCTTCTTC TCTCTCAC ATATACACAC ACACCTCTTC TCTCTCAGT

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TACTTTCACT GTCACCTTCT CTCTACTGGA TAACAGGCCA AAAGTACTGG CACTCATCTT TCACTTTCTT CC

SEQ ID NO:2076: (Length of Sequence = 223 Nucleotides)

GTCACGAGGT CAGGAGATCA AGACCATCCT GGCTAACACA GTGAAACCTC ATCTCTGATC TATTCAGGGC TCTNACTTCT  
TCTTGGTTTA GTCTGGGTG GGTGTATGTG TCCAGAAATG TATTGATTTC TTCTAGATT TTAGTTTATT TNGTAGAGG  
TGTTTATCT CTGATGGTAG TTGTATTTC TATGGGATCA ACGGTGATAT GCTCTTATC ATT

SEQ ID NO:2077: (Length of Sequence = 323 Nucleotides)

GTCCCCCTTC CCTCTTGTG AGACCAGGCT CTGTCTCAGG AACAGGCTG AGGGAGGAGG AGCCACGTTC CTCTTCCTT  
GGAGCCCTGA GGTGGCCAGG CTGTCCCCAC ATAAAGCATG ACATCCAGGT GCCAGCTGGC TAAGAAATGG AGCCTGAGGC  
TGCAGCTCAC CACCTGTACC TCACAGATGT CCATTGAGAG GAAAGAAGGG TGCTCCAAAC GCCAGGCCCC CAAGGAGCAC  
AGACTCAGGG TCCAGGCAGG TTCAGTGCTA GTAGGCAGGT GGGCACTGCT GTCCAGGAAA ACCTGGTGGG CAGCTGTTTT  
CCC

SEQ ID NO:2078: (Length of Sequence = 310 Nucleotides)

AATTTCAGT TGTAAATCA AACCTACTGA CATTATAGT CCCTTACTTT CTCTCTTTC TTCCATTGTA AATGTCTGAA  
ATGTCGTACA GTCATACTTC CCACTGTATT TTTAGGTTTT ACTCTCATAC TTCAATAATC ACTACCACCC TTTATTTCAA  
TAAAGTTTT AAGTCAGTGC TGATTTTTTG GTAGCTCCCA TTTTCTGATA TATTTGTCAT GTACATATGC AAGTGTATGT  
AATGTAGGTG TGCATCTATA TATACCCACA TATACATATA TACATATACA TATATATGTC CATATACAGC

SEQ ID NO:2079: (Length of Sequence = 281 Nucleotides)

GAGACCTGCC AGAAGATTAA AAAAAAGAAT GAGAGAAAAG CCCAGTTAGT GGTGTGCAAA CTACTTCCT TTAATGTCC  
CATGGATGTA GGACAGTGCC ATGTTTCAAG ATGCCTGTGA GCTAGGTCTT CAAGATTAT AGAATGTTAC TTATGAACAA  
AATATAATTA TTTATGGTAC AATCTTGTA CTTTAGCAAA TCTGGAGTTA GTTCATAGTC AAAGTCAGTT AATATTCTT  
AGAGGAAAGT TTTGGCTTTT TGTGGCAACA TTTTATAGC T

SEQ ID NO:2080: (Length of Sequence = 311 Nucleotides)

ATTAAAAAGA ATATTATTTA TTATCTNCTT TATTAATACT CACATGTAAC CTTTGTCTTT TACACAAAAG TCTGCTTTAG  
AAGAATGCCT CCNCGGCTTA TCATGCCCAA TGGGGCTTTT TGTTTCTGGA CCACITCCCC TTTCTCCACC CCCACCCCA  
CATCCAAATT ACTCTTAACA TGTTACAGA TACCACGNAT ATTTTGTAAG CAAGNTTGG GTTACTGGAA CTGATTTCA  
TTAATATCCC ACTTCAAAT GGAAGGCAGG TGGAGGGCAG GGTAAAGNAA TAGGGGGAAA GAGGGCAAGA G

SEQ ID NO:2081: (Length of Sequence = 207 Nucleotides)

GGACGCACGC TCGTGCCAT CACCGCTGGG TGGTTTTTTC CCCCTAAGTT TTTACTTAGC CTTTTTGGTT TGINTCCCA  
CCCCCACCTC CTCACCCCT TTCCAGTCT TCTTCAGGCC CTTCCAGAC GCACCCAGC GGCCCTGCA GCCCCTGCCT  
CCAGCCTCCA GCCTCACCTT TGTGCCAGA CTGCAATTG GAAGACT

SEQ ID NO:2082: (Length of Sequence = 260 Nucleotides)

TTAAAAGAAA GTGCATACTT ATTTGCAAGG AAAACAAATG GAATACAGCA AATTTTGA ATATAAGAC TTTTTNCAT  
TTATGTATGT GTTTACAATT CAAATAATA AAGCTAGTTA AAAGTCAATA CATATTAGAT ATATTCAAAT ATTTTNCAC  
ATAAATTCG ATCTTATCAG TTAACACCCA TAGCAAAAGA CTAAGGAGTA TTTGTATAAC ATTAGGTAT TTGACCTCAT  
ATCTATCA TTTGGTTTA

SEQ ID NO:2083: (Length of Sequence = 257 Nucleotides)

AGTTTCATAT GTTTATTAAA CCAAGCATGA GGCCCTTCTG TGCACAGGGC CCTGTGTGAC GGCATGGGAG GCGTGCTCAT  
GAGGCTGGGC GTGCCCGCCA GAGACCTTTC TAAAATGCAG ATTCAAGACT CTCTCTCTCA AGCCACCCTA GTGGCCAGTG  
GGGTCATTTC GGATCAGAGA TTCTTGAAT AGATCTAACT AAGATGGTAG ATATTATTTT AAATAATGCC TTTTINAGGA  
ACTAGCTGCT AGGCTCT

SEQ ID NO:2084: (Length of Sequence = 255 Nucleotides)

TATTATACAG CATGTCAAG ATTATTTGAC AAAAGGCAGT AACAAGCCGA AGGAAAACAC ATTTACAAGA AGCTGAACAA  
CTTGATCAG AACATACATC AAGGTGAAGA GTTTCGGCCC TCTTGGTATA GGTATGTAT GTGTACATCT CCAATTTTGA  
ACAATGATGA CATAAGGCT AATACTCTAT TTATTCAGG GACCCATAA TCAGGATAAT AGTAGGCATT CAGAGTAATA  
AAGTGATCAC AGTTG

SEQ ID NO:2085: (Length of Sequence = 290 Nucleotides)

GGAGCAGCG TCCTGCCAT CACGCTGGG TGGTTTTTC CCCCTAATT TTTACTTAGC CTTTTTGGTT TGTGTCCCA  
CCCCACCTC CTCACCCCT TTCCAGTCT TCTTCAGGC CTCCACAGC GCACCCAGC GGCCCTGCA GCCCTGCCT  
CCAGCCTCA GCTCACCTT TGTGCCAGA CTGCATTG GAAGACTCA CTCCCGCC AGGCTGGG TGTGGGCG  
TTGGAGATC AGGTTTTAAT CCACACAAG CCAGTGAGG GTGAAGCAT

SEQ ID NO:2086: (Length of Sequence = 342 Nucleotides)

AGTTTCATAT GTTTATTAAA CCAAGCATGA GGCCCTTCTG TGCACAGGGC CCTGTGTGAC GGCATGGGAG GCGTGCTCAT  
GAGGCTGGGC GTGCCCGCCA GAGACCTTTC TAAAATGCAG ATTCAAGACT CTCTCTCTCA AGCCACCCTA GTGGCCAGTG  
GGGTCATTTC GGATCAGAGA TTCTTGAAT AGATCTAACT AAGATGGTAG ATATTATTTT AAATAATGCC TTTTINAGGA  
ACTAGCTGCT AGGCTCTCTA TCCTGGGAGA AGAAGGTGAA GGTTCGCAA TATCAATTTT CCAACTCAG CCAAGATTTT  
CCAGCATCT NCAGGACAAG TG

SEQ ID NO:2087: (Length of Sequence = 306 Nucleotides)

TATTATACAG CATGTCAAG ATTATTTGAC AAAAGGCAGT AACAAGCCGA AGAAAACACA TTTACAAGAA GCTGAACAAC  
TTGTATCAGA ACATACATCA AGGTGAAGAG TTTCGGCCT CTGGGTATAG GGTATGTATG GTTACATCTC CAATTTTGA  
CAATGATGAC ATAAGGCTA ATACTCTATT TATTCAGGAG ACCCCATAAT CAGGATAATA GTAGGCATTC AGAGTAATA  
AGTGATCACA GTGAATGAA CGTGTTCACC AAAAGTCTTA GACCAACCTG ATATCATCTT ACACTT

SEQ ID NO:2088: (Length of Sequence = 326 Nucleotides)

ATGAATAAC TTAGGCAATC TTCCATTG ACTGAAATGA TTAAGATCAG TTTACCGAAA GTCATTTTAT CCTTGCCTTG  
CAGGCATCTG GCTATTCTTG GTGCAGGCT GATGGGAGCA GGCATCGCC AAGTCTCGT GGATAAGGG CTAAAGACTA  
TACTTAAAGA TGCCACCTC ACTGCGTAG ACCGAGGACA GCAACAAGTG TTCAAAGGT AAGCCTGCTC TCTCTCTTG  
CAAGAGTAG AATGTCTTT GTTCTTGGT TAGTTGTTT TTGTGGTGGC TTGGTGGGT TTTTGTGTTG TTGTCTCTG  
CCATCA

SEQ ID NO:2089: (Length of Sequence = 231 Nucleotides)

GGGTTTCCCT TTCCACTCAT CGGAGATCA GAGGGATGAG CTGGCACCAG CTGGGACAGG GGTGTCCCGT GAGGCTGTAT  
CGGGTCTGCT GATCATGGGA GGGGGCGGAG GCTCCCTCAT CTCTCTCTCC ATGCTGCTCC TCGCAGGAA GAAGCCCTAC

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GGGCTATCA GCCATGGCGT GGTGGAGGTG GACCCCATGC TGACCCCTGA GGAGCAGCAG CTCCGCGAAC TNCAGCGGCA  
CGGCTATGAG AACCCCACTT ACCGCTTCCT GGAGGAACGA CCCTGACCCG G

SEQ ID NO:2090: (Length of Sequence = 293 Nucleotides)

TTATGTGGAA TACCACACGC CCTGGTACAT GGCTGAATC TTCCCTTCA TCCTGCTTGG GGTCTTCGGG GGCTTGTGGG  
GAACCCCTCTT CATCCGCTGC AACATCGCCT GTGTCAGGAG GCGCAAGACC ACCAGGCTGG GGAAGTACCC GGTGCTGGAG  
GTCATTGTGG TGA CTGCCAT CACTGCCATC ATTGCCTACC CCAATCCCTA CACAGGCCAG AGCACCAGCG AGCTCATTTT  
TGAGCTGTTT AATGACTGTG GAGCCCTTGA GTCTTCCAG CTCTGTGACT ACA

SEQ ID NO:2091: (Length of Sequence = 274 Nucleotides)

CTTTTGAAT GGTCAAACAA TTTAAGTCAA ATGTTTAAAT GGTCGAATTA AAATAAGGGT TCAAACATGT TTTCAATATA  
TTAATTNCTT TAAAGTCATG TTCAGGCAAG GTGCTGTTTA AAAAACCCT ATTAGCTTTG TCCACACATG TAAGTTATCA  
AAAGTTACCA AGGTAATTTT GACGTTGAAT GCAGCTTTAA ACAATAAAAA AATGGTATTA GGTTTACTTC TCGAAGCAAA  
GAGAGCCCCC AACCTTGTA ACTAAACATT CTGA

SEQ ID NO:2092: (Length of Sequence = 290 Nucleotides)

GGTAGCTAGG ACGCTGGCCC TGTCCTCCGG CCGGNTCTGG TCAGACACAA TCATGGTCTC CACCACGAGG TGTGCAATGC  
CTGNGAGGT GGTTCGCTCC AGGTCCAGGA GGGCAGATCC ATGGGCGATG GTCTCTCTGA GCTCCAGAAG GCTACGGAAG  
GAGAGCGAGG CAACATGGGG CTTCCTCCAG CGCTCCGTCT CTCTCTCCAC GTCTCTCTCA AACTTGATCC AGCGGGCCGT  
CTCCCGCCAG TGGGGCTCCT GGCTGCGGTC CAGCATCAGC TCGTTCAGCT

SEQ ID NO:2093: (Length of Sequence = 323 Nucleotides)

AGCTACACTG ATACAAGTGG ACCTAAAGAA ACGAGTCCG CTACTCCGGG ACGAGACTCC AAAACCATCC AAAAGGGATC  
AGAAAGTGGG CGTGGGAGGC AGAAATCTCC TGCACAGAGT GACAGCACAA CACAGAGAAG AACTGTAGGC AAAAAACAAC  
CCAAAAGGC TGAGAAGGCA GCTGCTGAAG AGCCTCGTGG AGGCCTGAAG ATAGAAAGTG AAACCCCTGT AGACTTGGCT  
AGCAGCATGC CCTCCAGCAG ACACAAAGCA GCCACCAAAG GCTCAAGGAA ACCCAATATA AAGAAGGAGT CTAAGTCTTC  
CCC

SEQ ID NO:2094: (Length of Sequence = 255 Nucleotides)

AAGGATGTTT TGGTCCCTG CCTCAAGGCC GGCCATGTGG GAGTGTATC TGTGGAGTTC ATTGCCCCAG CCTTGGAGGG  
AACGTATACT TCCCATTTGG GTCTTTCTCA CAAAGGCCAG CAATTGCGG CTGCGGTCTG GTGCAGTATC ATAGTAGATC  
CTTTCCCTC CGAAGAGAGC CCTGATAACA TTGAAAAGGG CATGATCAGC TCAAGCAAAA CTGATGATCT CACCTGCCAG  
CAAGAGGAAA CTTTT

SEQ ID NO:2095: (Length of Sequence = 305 Nucleotides)

GCACTCCAGC CTGGGCAACA AGAGCGAAAC TCCATCTCAA AAAACAAAG AAAGAAACTN CTGAAGTCGG GGGCTGCTAG  
AGGATTTTCA GGAAGGGTCA ACACAGGCCT CACTTCCAGT CCTCATTTT CCAGTCCACA GAGTCACCAG AGGGTGAGAA  
GCAGAACGTG CCAGCAAAGA GGGAAAAGGC CACAGAACCA CTTTNTCTC AATTACAAAG GGGTGCATTT CAGAGGAGGG  
AATAGGGATG GAGAGGAGGA AAGACCTGC CCAGGAGCCA GATAAATTCA AAGTCACCAA GATGG

SEQ ID NO:2096: (Length of Sequence = 327 Nucleotides)



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CTAGATATAA CTACCCCTTCT CTATTCCTCA CCTAAATCCT TATACTGCTG ATGACTTTGG AAAATAGTAC AGGGTTTAC  
AGTCTAATCA TGACAATACA TCTCCAGGNT CCTTGAGCCA AATACATTCC TCAGAATACT TTTTTTAAAA AACTGAAATT  
GATTACTTGT ACTTTGTGTCAT CACCAAAAAT ATCTGTAGCA AGACATACTG TTCTCAGCAT CCACTTCTAC CATCCTCACT  
ATTGTAACTC ACAGTAGACT ATGCCTCCTA CTTTACTGAA AAGATACAAA CCATTACCTA GCAATCATTG TTCCACCTTA  
AACATAT

SEQ ID NO:2097: (Length of Sequence = 296 Nucleotides)

CACCCCTGCTG AGGTCAATTT CGTCACTGAT GCCTCGGGTC ACATAGGCCC TGATGACCCA GATTTCACAC AGAGGTCAGT  
ACATCGGTCA ACTTTCCTCC CAGGAGGGGC CGGGCTGGT GGGCCATGCC CACTCCGTGC CACATGCCCTA GCATTTCAGAG  
CTTTGTAAGG AAGCCCTGTT CTAAATGCTC AGGTCCCACC CTTCTTGTG AAGAGAAGCC ATGGGCTTCC TGCTCCTGTG  
TCACAGTGTG CCACCTGAAG GGTGGCTCTT CCCCATTCCT CTTCCATGGG GGCCAG

SEQ ID NO:2098: (Length of Sequence = 324 Nucleotides)

ATTGGTTTTN TTGAGTGTIT TCTCTTTTT NTITGTTTT AACATACTTA CTGGTATAA AGTCATGCAA AGAAAACAGT  
GCAGACAGTA GATCCTAGTG GATGTGCCAA GGTATTCCAC TCAGAGTCAA TCCCAGGGAA AGAGGGAAAG AGGAAAAGAA  
AGAGAGAATG CGAACCOGAG GCTGCAGGAT GAGGCATGAA GAGTAGAAAT TCCAGTGTCT TTGCTGTGGT CATCAGACGC  
CAAGGGGAGA GAGGCAATNA AGACACACGC TCACGGGGCC CCCAGAGGTG GGTGGGGGGT GCTGGGGGGC GGCACACAGA  
TATG

SEQ ID NO:2099: (Length of Sequence = 299 Nucleotides)

GAAACCGTCA GTAAGGAGCT CTTTATCTTT ACCTTCCAC TCCAAACCTA CTGCTAGCT GTTCTTATCA TTGCCTCCTT  
TTTCTGTGTC ACAAAAATGT GTTCCATCTT AATGAACACA TTTCATTAAAT GTCTTCTTA ATGAAGGACA GTCCCTTTCC  
CTGTGCTGTG AATCCCATAG TAATGACATT AGCTTAAGTT TTCTGAGCAC TTGCTATCTG CCAGTTCCTC CCATGAATTG  
TCTGTCTTAA GCTTTGCAGT ATACCTGTGA AATAGGTGGC AGTAGTTGTC CCACCATAC

SEQ ID NO:2100: (Length of Sequence = 308 Nucleotides)

GGCAGCTTAT TTTGGATTGG TTCACAATGT GGATCAAACA GGAAAATCTG TTATCATCAA CAAGACCAGC AGCACCAGAA  
TNNCCGAGT CTTCCAGCAG TGCAGGCTCC TCAGGNTGCG TGTCCTGCAC CCATCCACCT CTCCAGAGCA CACCCCTAGT  
CTCAGGTGTG GCAGCTGGCT CTCCAGGCTG TGTGCTTAT CCAGAGAATG GAATAGGGGG CCAGGTTGCT CCCAGCAGCA  
CCAGCTACAT CCTCCTTCCA CTTGAAGCTG CAACAGGCAT CCCGCTGGG AAGCAATCCT TCTTTAAT

SEQ ID NO:2101: (Length of Sequence = 291 Nucleotides)

GATGATGATT GCATGGGGTT TGATGCTACA CTGGATCATA GAGTGTGGGT TCTTCTTAC ATGINTTGGT AGATAAATGT  
CATAGACTGA TCCTGAATCC ACATCAACAG CATGGAATCC AGCACAGGAT CCATAGATCA CTTTCAACCT CTGGCCTTCC  
TCAACAGTGA GATCCACCAG TAATGGCTTA TGTACCAATT CTCCAAATGA CTTAAAGGCC ATAAATTTGG TGATATGGCT  
TTGGNGCCCA CGCATAGGAC TTCCACAGAA CTTTTTCRAA GGCAATCACC C

SEQ ID NO:2102: (Length of Sequence = 323 Nucleotides)

GATGATGATT GCATGGGGTT TGATGCTACA CTGGATCATA GAGTGTGGGT TCTTCTTAC ATGTGTGGG AGATAAATGT  
CATAGACTGA TCCTGAATCC ACATCAACAG CATGGAATCC AGCACAGGAT CCATAGATCA CTTTCAACCT CTGGCCTTCC  
TCAACAGTGA GATCCACCAG TAATGGCTTA TGTACCAATT CTCCAAATGA CTTAAAGGCC ATAAATTTGT GATATGGCTT

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TGGTGGCCAC GCATAGACTT CCACAGAACT CTTCAAAGCA ATCACCAGAA ATTTGATTCT TTCATATTTT ACAACTTTAT  
AAT

SEQ ID NO:2103: (Length of Sequence = 270 Nucleotides)

CCTTTCACTC CCCCGCCCTG GGCTCTGCT CTCTTGCCCTG GNTTCCTTCT TTTTGTAGGG AAAGAGGGTG GGGCTGCAGG  
CAGTCTACTG GCAGGACGGG AGGCTGAGTC CTCAGGGTCT CACACCTCA GTGCTGATGC CATGCCAACT GCCTGGGACA  
ACACCAACAC GTAAGGACCT AATTAAACCA AACCAGAGTC GGGTGTAGAC CAGCCCTGGG ATTTCCAGCT NTGACTNGGC  
CAGGGCACAC GTTGGTCTCG GCAGTGGCTG

SEQ ID NO:2104: (Length of Sequence = 367 Nucleotides)

CCTTTCACTC CCCCGCCCTG GGCTCTGCT CTCTTGCCCTG GCTTCCTTCT TTTTGTAGGG AAAGAGGGTG GGGCTGCAGG  
CAGTCTACTG GCAGGACGGG AGGCTGAGTC CTCAGGGTCT CACACCTCA GTGCTGATGC CATGCCAACT GCCTGGGACA  
ACACCAACAC GTAAGGACCT AATTAAACCA AACCAGAGTC GGGTGTAGAC CAGCCCTGGG ATTTCCAGCT GTGACTGGGC  
CAGGGCACAC GTTGGTCTCG GCAGTGGCTG TAAGGTCACC TTCCTTCTC TGGATGCTGG TTTCAACCAT CTATATATGG  
CATCCACGCA TGGGATCTGC AAGCTGGAGC CCTCTACCC GCAGCTT

SEQ ID NO:2105: (Length of Sequence = 288 Nucleotides)

GCAAAATTAC TGAACTACT ACTTTGGGCT CAGAACGAGC TGGACCAGAA GAAAGTAAAA TATCCCAAAA TGACAGACCT  
CAGCAAGGGT GTGATTGAGG AGCCCAAGTA GCGCCTGCNC TTGCTNTGGT GATCCAACAC CAGCCCTGCG TCGTGGGACT  
TGCCTCANAT CAGCCTGCGA CTGCAAGATT CTTACTGCAG TAGAGAACTC TTTTCTCTCC TTGTACTTTT TTTTGACCTG  
GNATCTTTTT ATAGGGAAAA ATGGCCTTTG TAGGCAGTGG AAAACTTG

SEQ ID NO:2106: (Length of Sequence = 349 Nucleotides)

GCAAAATTAC TGAACTACT ACTTTGGGCT CAGAACGAGC TGGACCAGAA GAAAGTAAAA TATCCCAAAA TGACAGACCT  
CAGCAAGGGT GTGATTGAGG AGCCCAAGTA GCGCCTGCNC TTGCTNTGGT GATCCAACAC CAGCCCTGCG TCGTGGGACT  
TGCCTCAGAT CAGCCTGCGA CTGCAAGATT CTTACTGCAG TAGAGAACTC TTTTCTCTCC TTGTACTTTT TTTTGACCTG  
GCATCTTTTT ATAGGGAAAA ATGGCCTTTG TAGGCAGTGG AAAACTTGCA AGGAAAGCTG CCGTCTCTTT TGGCAGTCTT  
GATGCAGAGC CTGCACTCTG GCACTCGCT

SEQ ID NO:2107: (Length of Sequence = 329 Nucleotides)

GTGACAAGCT CCAGAAGCCC GNTTCGCAAC ANCCAGGAGG GCCAGGCCAC TCCAGGCAGG AGGCAGTGGG CTGGCAGCCA  
CCCTGGGCAC AGAAGAGCAG ACGCAGACAG TGCTGGGCAA CGAGGGGCTT TTTTCATGGG CCCGCCTGCC CTGTCCCTCC  
CCCCAGGTCC CCACCTTCTA GGGTTAAAGT GCAGCTGGGA GGGAGGAGGC AGGCAGAATT NGGAGCTAG AGAGAGCCCA  
AGTGAACCCCT GACTGTCCAC GCAAGTCCCA TGTCCTCTC GTCTTGAGT TCCTCGAGGT TCAGCGAGCC CATCCCGCCT  
AGGGCCTCT

SEQ ID NO:2108: (Length of Sequence = 261 Nucleotides)

TTTTCATGGC AGCCTGAGCA GACTAAGACA GCAGCTAACA CAGCAAGATC ATACCAGTGA ACCTTCTCTG TTAGAAGACC  
TGAGCCTCCT GACTTCCGGT CACTGGATAC TCTCTGATG GCTCATGATT TAACTCTA TCTCACTGCT GGCTTGAAAA  
CCTCTAACTC TCTCTGCTC TTGACAGTGT TCCTCAAGG GAGTCCATTA GCCAGGACTA GTTACATGC CCCTGTGTTA  
GCTGTAGGG ACAAGGCAGA G

SEQ ID NO:2109: (Length of Sequence = 329 Nucleotides)

TTTTCATGGC AGCCTGAGCA GACTAAGACA GCAGCTAACA CAGCAAGATC ATACCAGTTA ACCTTCCTGG TTAGAAGACC  
TGAGCCTCCT GACITCCGGT CACTGGATAC TCTCTGTTAG GCTCATGATT TAAACTCTGT AGTCACCTGT GCCTTGGA  
CCTCTAATC TCTCTGCC TCAGACAGTGT TCCCTCAAGG GAGTCCATTG GCCAGGACTA GGTACATGC CCCTGTGTTA  
GCTGTGAGGG ACAAGGCAGA GAAATAACTG CCCAAGTTCA GCTTCCATA ATGTTTGGG GATGCTATGA CTCAACTTTG  
ATCTATTTT

SEQ ID NO:2110: (Length of Sequence = 271 Nucleotides)

GGCTTGAGCA GACAGAACGG GGAAGACTCC ACTCTGTCCC GAGGGGCCAG CCGCAGTTCC CCCAGGGCCA CCCTGCCCTG  
AGGTCCCTGT GTGGCCGCC TGGCTTGGCA GCGCTGCCCA CGCTGCCCC GCAACAATG GTGTGTGGT TTTTACAGCC  
CTTTTATAGG ACCCAATATG GGCATAAATG TAACACCTGT AGCGGGGCA GATTCTCTGT ATGTNCAGTT AACAAATTAT  
TTGTAATGTA TTTTATAGA AATCTTAAAA T

SEQ ID NO:2111: (Length of Sequence = 315 Nucleotides)

GGCTTGAGCA GACAGAACGG GGAAGACTCC ACTCTGTCCC GAGGGGCCAG CCGCAGTTCC NCCCAGGGCC ACCCTGCCCT  
GAGTCCCTGT GTGGCCGCC CTGGCTTGGC AGCCTGCCCA ACCTGCCCC CGCAACAAT GGTGTGTGGT TTTTACAGC  
CCTTTTATAG AACCAATAT GGCATAAATG GTACACCTGT TAGCGGGGCA AGATTCTCTG TATGTNCAGT TAACAAATT  
TTGTAATGT ATTTTATAG AATCTTAAAA ATTGCCTTTG CACTGAAGTA TTTTCATAGC TGTATATC TCTTT

SEQ ID NO:2112: (Length of Sequence = 275 Nucleotides)

GCAAGANAGA CCAAAACCTA ACCTGAGTTA CAAGAAACAA GACAGTAATG GCTATAAAGG GAGTGACCAG GAGCAACTGG  
GACACTCCTT TACCTCCCAT ATCCAATGTA TGTTTTTAC AGAAAAACAA CAAATTAAC AAATTCACAA AATACAACG  
CTAGAATTAC AAAATCCATT CATCCAAGGG TGGTAGAAGG CAGGATGGA AGGTGGAAGG GTAAATNGCA CAGGGAGAAA  
AACAAAGTGT TCCAATCAGT CCAGGCACAG GGAAT

SEQ ID NO:2113: (Length of Sequence = 227 Nucleotides)

GGCGCATCAG TGGGGGGTGC TGTCAAAATT AGTGAAATCA GATACAGTTG ATGGGCAGG AGGGTGGGGT AAGAGACAAC  
TCCAGTGACG TGCCAGGTGG GCAGGCTCCC ACTGTTCACT TGAGACGCTC CTCCCCTCTC AGGTGGGGAC AGGGGACACA  
CTCGCAGGGC AGGGCATCTT GGAGGTGTGG GTACAGGTGA GGGGAAATGG GAGGCACAGC CAGGAGT

SEQ ID NO:2114: (Length of Sequence = 339 Nucleotides)

GGCGCATCAG TGGGGGGTGC TGTCAAAATT AGTGAAATCA GATACAGTTG ATGGGCAGG AGGGTGGGGT AAGAGACAAC  
TCCAGTGACG TGCCAGGTGG GCAGGCTCCC ACTGTTCACT TGAGACGCTC CTCCCCTCTC AGGTGGGGAC AGGGGACACA  
CTCGCAGGGC AGGGCATCTT GGAGGTGTGG GTACAGGTGA GGGGAAATGG GAGGCACAGC CAGGAGTGGG GCAGGAGGGA  
AGGCCAGTTC GTNGGCAGGC TGAGGAGGGA ATATNACCCC CCTCAAGTCC CCAAAGTGGC AGGCAAGTTA AGGGGCCCTG  
GATGAGGTGG CCGCTCATG

SEQ ID NO:2115: (Length of Sequence = 262 Nucleotides)

TGGAACACAA AATTCCTCTG NTAAACATG TACATTCGGG GCTTACCTGC CCTTGAGGAT GTCTAGTTA CACCTCTCT  
GATACCTGTG GAGTTTAAGC ACCATTCTTA CCGCTGTCTC CTTTNGAGG GCGTGCATC GAAGCTCTTA AAGGGGATG  
CTTGCTCTGC CTCTGTGGCT TTTTGTGTGG GAAAGGGAGT TNGGATNGA GGATTTAGAT TTAGGTTCAT GATGTCAGG  
CACACCAGGA ACTCCCAAGG CT

SEQ ID NO:2116: (Length of Sequence = 153 Nucleotides)

AAGAAGCGAA GAGGATTGCT GAGCTGGAGC AGCGCAANAC ACGGTGCTGG TGACAGAACT CAAAGCCAAG CTCCATGAGG  
AGAAGATGAA GGAGCTGCAG GCTGTGAGGG AGAACCTTAT CAAGCAGCAC GNGCAGGAAA TGCAAGGAC GGT

SEQ ID NO:2117: (Length of Sequence = 231 Nucleotides)

GAATATAATG TGTATCTNCA AGGNTGATC CACCCTTNC CATCCTNTGG AGCTCAGAGA TTCTTGGGAG CTGAAGGTCT  
TCTTAATGTC AGATCAGCAA CCCCAATCTC AGGCAGCTCG GATTGCTGTC TCTGATCTN CCGCTGGCCA ATGTAAAACC  
AGACGCAGGC GACCCAGTGC GCGACAGGGC GAACACGGCC ATGAGCAGTG TCAGCACCAC GGCGCTGTAC T

SEQ ID NO:2118: (Length of Sequence = 309 Nucleotides)

CGGGAAAGAA CAAATTGGAA TGGTGGGGGA TATGGGTGTG TGGTGGGGGC GGGGCAGGAG GTCCTCCGGG GTCCAGCATG  
GGTCGGGAGT GGGAGCAGGA CAGAAGGTGG CCACGTCACA GGCGACTGAT GCTCAGCTCA AGGGGAGTGT GAAGAGGTG  
GCAAAGAGCT GGGGAGCCGG GCAGAGGGAC AACACTGACT NAGGACATIN CAGTTGGGAA TCAGAAAAAA AGGGGCAGCT  
CAGGGGCATC TGATCTGCCT CATTTTGTAA AAAGAAACAG AGTAATGTAC AAAATTCTGG ATATCTTCT

SEQ ID NO:2119: (Length of Sequence = 308 Nucleotides)

GGTAATCGTT GAAGATTACC AAAGGTTTAT TTGGAATGAC ACAGCACTGA AAACATAATT GTTACAGATG ATTTGTGGAT  
ACAGCATACA CCATCTATTT TACTTTAGAA CAATCTGTGA AGATGAGTTG CATAAATAGA AAGAGGTGGA AATATAGAGG  
AGCTGTTTTT ATAGTGTCT TTTGGGGTGA GATGAATATG CCCCATCTTT CTACCCAATC TCATAAAGGC AGAAGAGAAG  
ACTGCTTAGC TGCCCATCCC AACTAGCCTA CTTCCAGCCA CAGCGGCTGG ACAGCTAGAT AAATCAGG

SEQ ID NO:2120: (Length of Sequence = 237 Nucleotides)

CCGCTCTCCT GACGGGAGCC CACTAGGGGG TCTCTTTCA TCTTTGGTGT GGCTTACCT CCCACCAAAG AGATCCGAGG  
CTTACTCTTC TCTCTCTGG ACCAGCATGA CCCAGGAGTC CTTCCAGGAG AGCTCTGTGA AGGAGCTGAG GCGGCTGGAG  
GACCAGCTGG CCGGCTGCA GCAGGAGCTG GCGGCTCTGG CACTGAAGCA GAGCTCGGTG GCGGAAGAAG TGGGCT

SEQ ID NO:2121: (Length of Sequence = 224 Nucleotides)

GCGGTCAGAG GCTGAGGCCA GAGAGGTAGC AGCGAACTN ACAGGGAGGC CAGGGGCAGA GCTGACCCTG GAGAGGGATC  
CTNATGTCCT AGACACATGG TTTTNTTCTG CCTGTTCCT CTTTNTGCC CTGGGCTGGC CCCAAGAGAC CCCAGACCTT  
GCTCGTTTCT ACCCCCTGTN ANTTTGGAA ACGGGCAGCG ACCTTCTGCT GTTCTGGGTG GGCC

SEQ ID NO:2122: (Length of Sequence = 202 Nucleotides)

CAGCTGCAGC TTCCAACCAA GAAAACCTCA AAGCATTAGG GAAGGAGCAG GTGTGGGGCT GGGGTGGGA GAATCCCTA  
AGCTCCAGGG CCCAGGTCT AACCTGAGAG GTCGGGGCTG CAGGAAGCTG GGGGAGGCTC CCGGGGCTGG GGAAGAGGA  
GCCTGCCCC AGCAGAAACA GCAGGTCTCA GCGCTACAT GT

SEQ ID NO:2123: (Length of Sequence = 359 Nucleotides)

ATTCTCTCT GTTCTCTTGA TGTGTAGGGA AATTGAGA ATGACTCTGA TAAAAATCTA AAAGAGAAAC ATCGAATCCT  
AATGGCTGT GTGACCCTAA AACCTTACTC CGTCTCTTGG AACCTCAGAT TTCTCAGGCT TTGGCACATA GCAAGCAITTT  
CATACTCAGA AGCTGGTACT ATTACTGTTG TGTTTGTGG GGGGAGGTTT GTTTGTTTTG TTTGGAGACA GGATCTGGCT

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TTGTTGCCCT GGCTGGAGTG AAGTGGCGCC ATCATAGCTC ACTGCAGCNT CGCCCTCCTG GGCTCCAGCG ATCCTCCCGC  
CTCAGTCTCC CGAGTAGCTG GGACCACCTG CGGATGCCG

SEQ ID NO:2124: (Length of Sequence = 233 Nucleotides)

GAAACGCCGT GCATCTCTTG TCTGTTGGCA GCGAGCACAT CGTNTGGAGA CACGAGTTTC TAAGCAGCTG GCACGAGGGC  
TGCTGACGGC ATGGGTCTGT CTTCAGGGTG GCAATACCTC TTAGGAACCT AGGGCAGGAA GCAATACCTC AGCATTGAAT  
GTGTGTAAAT AGTTGCTTTG AGTTGCAATT GCTATTINCT TCTCAGTCCC AGCTCAGATC GAATTATATA TCC

SEQ ID NO:2125: (Length of Sequence = 241 Nucleotides)

GCCATGGCCT TTGGTCAGGT TCAGGGGGGC TGAGGGGGTG CTCTCCCT CCCTCCAGGC ACTGACACAT TGAAAGGAAG  
CAGAGCAACA ATGACACAGC ACGGATGTGG GAAAGGGGAT CCCCCACGCG GGCAGGATGG TCCATCTCAC CGGGGTCTCA  
CCAGGACTCC CCGCTCCAC CCAGGGCCAG CAGAGCACC TCCCGTTTTC TCCCCAGTGC AGAGCGTGGG GTGACAGGAG  
T

SEQ ID NO:2126: (Length of Sequence = 275 Nucleotides)

GTGTGCCCTC TGTCTGTGTC TTAATTCTATA AGGAGTTGTA TCTTCCACC TGCATTTCAA TACTGCCGGT TAGGACCTAA  
GTAGAAGAGC AGTAAAGGCT GATTGACACA CAGGGGGATG GAGTTGGTCC TTGTCCATTC TCTACCCCTT GCTGTGCTAG  
TATCAATCCT TATCCAGAA GGTACTATTT AGACTGTATA GACTGATTGA GATTACATAC TTAGAGGAT TAAGGAAACC  
ATAGAGTTTG GGCCTTGAA CTGTTACTGC CTGT

SEQ ID NO:2127: (Length of Sequence = 296 Nucleotides)

TTCAGCCTTA TCGAAACACA TGAAGCAAAA CCATTGAAAC TGTATGTGTA CAACACAGAC ACTGATAACT GTCGAGAAGT  
GATTATTACA CCAAATCTG CATGGGGTGG AGAAGGCAGC CTAGGATGTG GCATTGGATA TGGTTATTTG CATCGAATAC  
CTACAGCCCC ATTTGAGGAA GGAAAGAAAA TTINTCTTCC AGGACAAATG GCTGGTACAC CTATTACACC TCTTAAGAT  
GGGTTTACAG AGGTCCAGCT GTCCTCAGTT AATCCCCCGT CTTTGTACC ACCAGG

SEQ ID NO:2128: (Length of Sequence = 322 Nucleotides)

GCATGGGAGG GAGGAAGAGA GGTTTGGGGT GCGGTGGCAG GTGATATAGG GAAAGGGCTC ACGTTTCAGA ATCTGTGAAC  
AATTCATTT TTATCAGAT AGCAGAACAA CTACACAGC AAAACCTAGA ACATCTCAGA CAGCAGCTCT TGGAGCAGCA  
ACAGCCTCAA AAGGCCACTC CTCAGGATAG TCAGGAAGGA ACCTTTGGGT CAGAGCATTG AGCGTCACCA TCACAAGGGA  
GTAGTCAGCA GCATTTTCTT GAACCTGAAG TCAATTTGGG ATGATTCAT AGATATTGAG CAACAGGATA TGGATATAGG  
AT

SEQ ID NO:2129: (Length of Sequence = 222 Nucleotides)

TTTAGTGGGT CTGGGGTGGG CGCGGCCCCG GGCTAACGGG GCGGGTCTCC TCTCTAGGC GCAGGAGTGC GCGGTGCTCT  
CCAGGCCTCC CCGGCTAGGT GGAGCGTGAC ACCGCAAGC ACACCGTCTT ACCGAGGGG GGGCCAGGCG GCACCAAGCC  
CTCCCAGAT GGAAGTGCC GGCAGACAGC TGCCCAAGAC CTCACAGAAC AAAGATGGAC AT

SEQ ID NO:2130: (Length of Sequence = 191 Nucleotides)

GTGGGATGCT TTATTTCACT GTGGCGGGA GGAACCTGG ACACGGGCG GCACGGGCG TGGGNGGCTG TCACTCAGGC  
GGGGACTAGG CAGGGGAAGG GCTGCCCCCA GGCCTGTGA GGAGAAACTN AGGCCAGCCC TGGCGGAGAC CTAGCCAGC  
GGGGTAAGGA GGGTGGGGA AACTGGGTC T

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SEQ ID NO:2138: (Length of Sequence = 305 Nucleotides)

ATGCTGAGTC GCAGTTCOGA TGTTCTTATG CTTCATCAG CAAATCTCAA TTGTCAAGA TTCATGACAG ATTCTTCCCC  
 AGCGTTTGGT TTAATTGGAG GGACTTTATC TCCAGGCTG CATGACTCTT CGATGCTCAG GGCACATGCC CGACCAAAGA  
 CAACCAGGTC CAAGAGCGAG TTINCCCCGA GCGGTTGGC ACCATGTACC GAGGCACAGG CGGCCTCCCC ACAGGCGTAC  
 AGGCCGGGCA CAATCTGATC CTGGCCATTC ACGTGCTCA GGACCTGCCC CTGTAGTTG GTGGG

SEQ ID NO:2139: (Length of Sequence = 263 Nucleotides)

CGGCCCCCAG CAACAGCTTC AGCCCTCTCC ACCAAGCTTG CCATCAAGGA GATTGCACCA CTGCACTCCA GCCTGGGTGA  
 CAGAGTTAAG ACTCTCATGG GGACACTACT GTTCAAAAGG CCCTGGCCAA ATAACCCCA AATGAAACAC TCAACCCAAG  
 GATGTTTTCA GCCCCTGTT AGTGAAGCTG GGTGCAGAAT GCAAAGCCTC TAAAAGGAGA GGATACAAAG TCAGGTGAGT  
 AGGGGCCATT GGCAATGCTC AGA

SEQ ID NO:2140: (Length of Sequence = 255 Nucleotides)

CTGCTTCANT CTGCGCCCT CAGCTGTGGC TTCCCGCAT GCCCTGTGAC CCCAAGCCGC AGGTACAGGA AAGAAGTTTG  
 TGCTGGGGGA CTCAAAGACC CAGAGTTAA TTAACAGGAA CCAGGGCCAG GGGCCTTCAT CTAGAGGTCA GTGGAGTCTC  
 CAGGGCACTC ATCACTGTGG CTGGGAGACT ACAGTGTCTC GGCTGCGGAC TTGTGGAAGA AGAGGGGGAA GGATGGGAGA  
 AGGGGTGACT GGATG

SEQ ID NO:2141: (Length of Sequence = 355 Nucleotides)

TTTAATTAAA TACCACTTCA TAATGTIATT TGCACCTAGT ACTTTTTTTT TTTTAAATAA GACATGCCAT AAGTCGTGAA  
 GTTAACAAAA TATAAGCATC CGCACAGAAT ATATCTAAG GTGACTTCAT TTACACCGCT TCTCAGAGAA ACACACAAGT  
 AACCTTTTGT CTGCCTATCA GCCAGTGTG AAACAGCTTT GGAATTCACA TGGAAGGCTG CCGGCTGGT TCCCCAACAC  
 TNGCCTGATG GAGTCCTGTA TCCGNACCGT GCCGTCAAAC TGGCTGGTTT CCACTAGAAA AGCAATGGAG AGTCAGCTCT  
 CCCCTCTTTA CCCAGCGTTC AACTCCACAC TGCAA

SEQ ID NO:2142: (Length of Sequence = 391 Nucleotides)

CTGCTAAGTG CCATGAGACC TTAGCAGAGG CTGTGGGTGC CCCGCCCAT TCCCTCCACT CACTCTTCCT TGCAGGTGGA  
 CCTGCCCTTC TTGTCTGAGG CCTTCTCTG CCTCCAGAGC CTGCTTGGTC CTCAGGCTGT AAGTGCAGGC AGAGCTAATG  
 TCTCTCCATA GCTGCCCTCC ACCAGCCTGC TCCTGAGACA CCTGCTGGCC AGCAGCCTGA AGCAGAATCC TTTACTCAGA  
 TTCAGCCGCA CAGATGCTCA CTGCAGAGAT CTCCAAGGNC TGTGTCATC CTTGAGCCCA TCTCAGATTT GTGTGGATAG  
 GGTGTTAGAG AACATGGAAT CAGCTGGATA GAGTGGTTCA TGCTGTAAAT NCCAGCACTT TTGGGAGGCT T

SEQ ID NO:2143: (Length of Sequence = 326 Nucleotides)

GATGCAGAAC AGCTTCTTGC AGAAGCACCT GCTCCGGCAT CCAGCGCTGC CTGGAGGCAG GAAGGAGAGG CAGGCGAGGA  
 CACGCTGGTC TGAGATGAGG GGGAGCCCCA CGGGCCCCAG GCAGGCTAGA GGAGGCACAG GCCCTGCCAC GGCCAACCTCA  
 GGTACGCCAG CCTGAGGCTG TGGCTTCCAA AGGGTCTGGG CGCACCCCCC AGGTGCGAGG TINTGAGGC CAGCCAACCT  
 GCAGAGCACT CGCGGCTGG GTGGGCTGAG TGGAGGTGCC TGGGAAGCTG CCTAAATTCA GAAGCCTCCA CTTGCCATGG  
 AGACTG

SEQ ID NO:2144: (Length of Sequence = 357 Nucleotides)

GCACCGGGCC CCAGGAGCCC ATCAGTGACA GAGTGCTCCA TGATGATGTC CTCCACCCGG GTGATGTACA GCAGGTCAN  
 AGCACCCCCA GGAAGTGGGA NAGCAGGATG CCCAGGAGGA TGCCCGCCAT GATGGTGTAG TTGTCCATGA ACCAGATGAT

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CACGCGTTG GTGCAGCCCC GCACGTAGAT GACATCTGC ACACTGAAAC GCTCCTGTG GATAGTTTIN TAGCCACACA  
 TGGTGTGAC AACTTCTGTC GTGTTCTGA TGCAGCAGGT GTAGGGCACC CCACAGGCCA GGGGTCCAGG GGCAGTGCAG  
 TCGTGGTACT GATTCTTGCT CCAATCTCGG TAGTCCT

SEQ ID NO:2145: (Length of Sequence = 420 Nucleotides)

CGCCAGGAGC TGCTAGCCAA AGCATTGGAG ACCCTACTGC TGAATGGAGT GCTAACCTG GTGCTAGAGG AGGATGGAAC  
 TGCAGTGGAC AGTGAGGACT TCTTCCAGCT GCTGGAGGAT GACACGTGCC TGATGGTGT GCAGTCTGGT CAGAGCTGGA  
 GCCCTACAAG GAGTGGAGTG CTGTCAATATG GCCTGGGACG GGAGAGGCCC AAGCACAGCA AGGACATCGC CCGATTCAAC  
 TTTGACGTGT ACAAGCAAAA CCTCGAGAC CTCTTTGGCA GCCTGAATGT CAAAGCCACA TTCTACGGG TCTACTCTAT  
 GAGTGTGAC TTTCAAGGAC TTTGGCCCA AGAAAGTACT CAGGGAGCTC CTTCGTTTG ACCTCCACAC TTCTGCAAGG  
 CCTGGGCCAT ATGTTGCTGG

SEQ ID NO:2146: (Length of Sequence = 390 Nucleotides)

CCCAAATACT GTTCCCAAA CTATGTGGG CGGCCGAAGC ACATGCGGT NATGGCTGGA GCCCTGGAGG GGGACCTCTT  
 CATCGGACCA AAAGCAGAGG AGCACCGGG GCTGCTGACC ATCCGCTACC CCATGGAGCA CGGCGTGGT CGAGACTNGA  
 ACGACATGGA ACGCATCTNG CAGTACGTCT ACTCCAAGGT TCAGCTGCAG ACCTTCTCGG AGGAGCATCC TGTGTCCTC  
 ACGGAGGCC CGCTCAACCC GAGTAAGAAC CGGGAGAAGG CGGCAGAGGT GTTCTTTGAG ACCTTCAACG TGCCGGCCCT  
 GTTCATCTCC ATGCAGGCTG TTCTCAGTCT GTACGNAACA GGACGCACGA CAGGAGTGGT TCTAGACTCA

SEQ ID NO:2147: (Length of Sequence = 219 Nucleotides)

TTTGTGGTG GAGAGAACT GGTGTCTGC CCGGCTCTG TTGGTCACAG ACAGCTCCAG CAAGAGCAGT TGTAAAAGT  
 GCCAAGCGTG TGTATCACTG TGACAAGCCG TTGCTTACT GCCCTGTTCC CTTCAGCCA AACCAGCTGA TGAAGAACTG  
 CTGCCAGNG GGTCTACAG CAGGTACAA ATGACCTAGT TTCATTTTAA GCAGACAGA

SEQ ID NO:2148: (Length of Sequence = 353 Nucleotides)

GAATCTTTA TTACAAAAT ATTTTGCAAG CCAAAAAGT TAAGTGCAG CTATATACAA AATGGGCCT GTTCCCTCC  
 CAGCAGTCTT AAAATAAACT CCTGAAACCA TGCTCCTCC GCAGGTGGT TCGACCTCTT CCTTTCTCG GGGTCAATA  
 CACAAGGTAT GTGGATTCTC CAGGTGCCA GGCTAAAGCT AAAGCTATAC ATCTTCTTG GCCTTATTCC CTTATTTCCC  
 CCTCAAGAA TTAATAAATA AAATAAAATG AAAATGGCAC CAAGAAAACA TTCTTTTAA ATACTGAATG TGTGTGTGCA  
 TGGTGTGCA CAGTATGTC CTGTCTCTG GGT

SEQ ID NO:2149: (Length of Sequence = 394 Nucleotides)

GGGAGACTT TGGGCTTIN TCATGACTGT TTGGTGGAA GGTAGCTCAA GTGTGTGTGT GTGTGTGTGT GTGTGTGTGT  
 GTGTGTGTGT GTATGTGTGT AAAGTGCTAA GAACTGTGCA TTGACATCCA AACATTTCTT GTACAAAATT TCCCTAGCAA  
 AGCAAACCTG CTTTGACTTA ATTTATTTGT TAAATGTGTC ACTTTGTTTA TGTATGTTTT GTTTTGGTG GGAATAAGG  
 AGAGAGAGGA CGACAAATTC TATTGAAGTA TTTATTTGT GAAGATGGCA ATTTTGCAAT TGTTTAAATA TTTTTCATTC  
 NNTTAATTTT GTTATCAGTG CCAGCCCAAN ATACCTGCTC TACCATTAAAT TTGCGGCCT GATAAAAAGG GTCC

SEQ ID NO:2150: (Length of Sequence = 200 Nucleotides)

ACCTCCCTGG GCTCGGAGA CGCTGACAGC TGGGACGACA GCAGCTCGT CAGCAGCGGC ATCAGTGACA CCTAGACAA  
 CCTCAGCACT GATGACATCA ACACCAGCTC CTCCATCAGC TCTTATGCCA ACACACCTGC CTCCTCTCGA AAAAACCTGG  
 ATGTGCAGAC TGATGCTGAG AAGCACTCAC AGGTGGAGAG

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SEQ ID NO:2151: (Length of Sequence = 369 Nucleotides)

GTGCGCCCCA GTCTTTCTGA AACCTGINAT CACACTTGGG GCACGTGCCC CTCTACAGTC AATCTGTGTT TTCAGAAGTG  
 GCCCCAGGTT CACTCGTCTT ACAGCAGTCC TAAAGAGCCG GCTGCCCTTT CCCTAGGCCTT CCTTGCTCTT NAGGGCTAAA  
 TTCCAGCCCT CCTACCCAG TGCCACTTGG GTAAAAATAC TCTGCTCTC TCACGTTTGC TAATAAGCCC GGGCTCCGAC  
 TACCACGTT CGGGGAAGG GAGCCCTTA CGTCATTGC TGGGTCCGCT CCGGAAAC ATGTGCCGA CCTGACTTGT  
 GCGGGGCAT CTTCCGGAA ATGCCGTTT TGTTCCTC TAAGGGTGT

SEQ ID NO:2152: (Length of Sequence = 312 Nucleotides)

TTCAACA AATGTGGGA GAAACACACC TTCCAGCAA TAGAAAATCT CTATAAGTG CATTTGCCT GCAACCATCT  
 CTCCCCATG CTGCCCTTG GGTGAGGATT TGAGGCACTG TTCGAGGGA GCCCTCAGG CCACCTGAGC TGGGAGAAGG  
 GAGGCATGAA GCCACCATGG AGCTCCAGGC TACTGGACAT ACCCTCTCTA CCTGCCCTT CCTNITGGC TCCAGGAGTG  
 CACTGCCTGA CTCCACTGGC AGGTGATCT GGAACGGGC TNGGCATGCT AGGGATGGTG GAGAAGTAGG CG

SEQ ID NO:2153: (Length of Sequence = 325 Nucleotides)

CCGAGCCCA GAATGTAAAT NAGGCCAAA TGCCACTTC CCAGGCTGAC ATAGAGACG ACCCAGGTAT CTNIGAACCT  
 GACGGTGCAA CTGCACAGAC ATCAGCAGAT GGTCCCAAG CTCAGAATCT GGAGTCCCG ACAATAATTC GGGCAAGAG  
 GACCCGAAG ATTAATACT TGAATGTGA AGAGAACAGC AGTGGGGGAT CAGAGGCGG CCCCCTGGC TTGCAAGGAC  
 CTGGNGTCT GCACCACTTC CAGTGACCAC TTCAGAACCC ACCTNGGNC ACCCCCAAT GTGCTCTGGC AGACGGCATT  
 GCCTT

SEQ ID NO:2154: (Length of Sequence = 326 Nucleotides)

ATCATTTAAT TAACATCTT AAATGAAACA CAGTTTCTT CATGTGCTC ACTCAGGCTT CAGGGCAGAG GGAATGGATT  
 TTTAGACATA TCAAAGACTC AAAAATTTAA AGAAATATAT ATATGTATAT ATATACTTCT AACATTTTAT GGAATTTAA  
 AATCAGAGGC TTTTGGTCTC TCCATTTACT CTAGGTCAAG CTCATTTACC CCAGAGGACA AAGAAGGGCT GCCTCTTCTA  
 GACCTCCCT TCTCCTTGT CTNITGCCC ACCCAGCAGG GAAACAAGCT CAGAAGGATC CTAACAGGAT AGAGTTTCCA  
 GTAAAT

SEQ ID NO:2155: (Length of Sequence = 317 Nucleotides)

TGGATGAGGA GACCTGAAC ACACCTGCT ACTGNCAGCT GGAGCCCAGG GCCTGTNACA TCCTGCTGGA CCAGCTGGGC  
 ACCTACGTTT TCACGGGCGA GTCTATTCC CGCTCAGCAG TCAAGCGGCT CCAGCTGGCC GTNITCGCCC CCGCCCTCTG  
 CACCTCCCTG GAGTACAGCC TCGGGTCTA CTGCTGAGG GACACGCCCTG TAGCACTGAA GGAGGTGCTG GAGCTGGAGC  
 GGACTCTGGG CGGATACTTG GTGGAGGAGC CGAAACCGCT AATGTTCAAG GACAGTTACC ACAACCTTGC GGGCTCT

SEQ ID NO:2156: (Length of Sequence = 372 Nucleotides)

CTCCAGCTG GCAGCCAGT GGCACCCA TGCAAGCAC TTTCAGTGG GACTCTTCAG TGGCAGCAAG GCCACCTGAG  
 GCCCTGINTC CCAGCCACTT TCCCTCCTGG CACTGCCACC AGCCTCACCG AGTGGGCGA TCTGGGCTCA CTGCAGCCTC  
 TGCTCCCGG GTTCAAGCAA TTNCTGCTC TCAGCCTCCT GAGTAGCTGG GACTATAGCC GGTGCGGCC ATGCCAGCT  
 AATTTTGTIA TTTTATAG AGACAGGATT TAACTATGTT GGCCAGGCTG GTTTGATT CCTGACCTCG TGATCCGTNC  
 TCTCAGGCT TCCAAAATG CTGGATTAT AGGATGAGC CACCACTTCC GG

SEQ ID NO:2157: (Length of Sequence = 351 Nucleotides)



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CTGGCTAACA TGGTGAAATC CCGTCTCTAC TAAAAGTACA AAAAATTAGC TGGGCGTGGT GGTGGGCACC TGAGCCCCA  
 GCTACTTGGG AGGCTGAGGC AGGAGAATGG CGTGAGGCAA CAGTGCAGCC TGGGCAACAG TGCACCTCCT CCATCTCTAC  
 CAGCGTCCCC TCCAGTCTGC ACGGGGCAGT CCTCCTGGGC TTGACCTCTC TGTACCCACA GCTGGGGGCC AGGCAGCCCC  
 CCTCTATCCC TCCCAGCACC TACTACATCG NCCNACAT CCGTGATTCC TGTGTATTG GAACTNITG CCAGAGATGG  
 AGGTTCTCTC GGAGTATCTG GGAACGTGTC C

SEQ ID NO:2158: (Length of Sequence = 280 Nucleotides)

CAGCTCCTGA GGACCGCTGC AGTGATGACA CAGGACTATT GCATCAGCAT CGTGCTCACA GGAATCAGA GCTCAGCCAG  
 GAGAGGTCCA AGAATGACAG AACCATGAGC ACTCCTACCA AAATCAGCT CTGCTCAGCC AAATCAACAA TTCAACCCAA  
 CAGGNCAACT CCTAACACAT CCCATCCAGA CAGACATTAG AGGCGCACAG CAGATGAACC TCCTACTTAC ACTGTCCAAG  
 GAAGCTGGAC TATCAATTCC CAGTAAAAGT GGGGAAAGG

SEQ ID NO:2159: (Length of Sequence = 342 Nucleotides)

CTTGTCGTT TCTCCTACCA GATTGTGCAT GCCTCCTGTG GGCAGAGCCT GTNCTGACTT GCTCCTGGGT CTCCAGCATC  
 ACCCAGTCTG GAGCTGAGGA CTTGGGTACC TACAGATTTC CTTCACACT GTCAGAATTG AGATGAAGGA AGCCCAGAGA  
 AATCAAGTAC CTCCACCAG GCAGAGCAA GTCTCTGGTG CCCAAAATCC AGGGAAGGCA AGGCTGGGG GTACAAGCAG  
 AGGATCTGAA GAGGTATATG AGAGTNGCCA GCACAGACCT GGCATAAGCT TGGTGCTCAG TGAAGGTTAC CTGATGTTGC  
 TGGGCACCAG GGGTGATGCA GT

SEQ ID NO:2160: (Length of Sequence = 376 Nucleotides)

ATCTTAAGAC ACATATGGAA AACAATAGGG TAGAACTTAG TAACTACAA GAATATAAAT TGGAGCTAGA TGAAAAGGCA  
 GTGCAGGCAG TAGAAAAATT AGAAGAAATC CATTTACAGG TTAGTTTTTT AAATCAGGTA AGTTTATCTG TAATGTGCTT  
 TCATTTATTT CACCGCAAAT TATATTTTGG ATATGTATAT ATTATGTTTC CTCGCTCT CTGTAGCAA TTTGCTTTGT  
 AGAGTTCTAG AAAAAAATG GCATCTGTTT TTCTTTTAA ATATTTACAT TTCCATTAT ATTATAACAA AATCAATCTT  
 TCAGAGTAAT GATTCTCACT GTGGAGTCAT TTGATGATTA AGATCCAGTT GGCATA

SEQ ID NO:2161: (Length of Sequence = 404 Nucleotides)

CCTCCTTCG GTTCAACTG GACTTCTATC AGGTCTACTT CCTGGCCCTG GCAGCTGATT GGCTTCAGGC CCCCTACCTC  
 TATAAACTCT ACCAGCATT CTACTTCTG GAAGGTCAA TTGCCATCCT CTATGTCTGT GGCTTGCCT CTACAGTCTT  
 CTTTGGCCTA GTGGCCTCCT CCGTGTGGA TTGCTGGGT CGCAAGAATT CTGTGTCTCT CTCTCCCTG ACTTACTCAC  
 TATGCTGCTT AACCAAATC TCTCAAGACT ACTTTGTGCT GCTAGTGGG CGAGCACTTG GTGGGCTGT CACAGCCTGG  
 CTCTTCTCAG CCTTCGAGG CTGGTATATC CATGAGCAG TGGAACGGC ATGACTTTCC CTGCTGAGTG GATCCAGCT  
 AACC

SEQ ID NO:2162: (Length of Sequence = 339 Nucleotides)

CAGTGCCTTT TTGTAGCTTG GGATCTAATT TGTAACACCT TGCTACCTAT GAAAAGTGGG AATGTAAAAG GGAAAAAGCA  
 ACTTGGCATT TACTAACTT AGGCTAACCA AAACCTCTG TAGAGATCCT TACTAGACAT GGGTGCAACA GCAAGCATCC  
 CAGAGGACCC ACCACTGGGG TATGTTTTAG GCCAATGGAG CAAATTCAAA TTTGGCTAAA AGAAGAAGAA ACTCATTTAG  
 TATGCAATA ATATTTGCGT TCGACACAAA GTGGCAAACC AACACATTTG GCCTAAACAT GGTCTATAT GTTAAACA  
 TACTTTACAA TTAGACTTC

SEQ ID NO:2163: (Length of Sequence = 285 Nucleotides)

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CCCCGCCACC TCCAGCAGGA GCAGCTCAGT TTGTGGCTCT GGGAGCTCCG CTTTTCGAAA CCCAAAAAGG CTGTGCATTT  
GGAAGCCAAA CGCTCAGCAT GCGGCTGCCG AGTCTGGTTT TGTGGACAAA GCAAACTGTG GAATGGCTTC TCGGTGTCTG  
TATAAAGGA CAAACGGTIG CATTACCCCT TTGTACTATA ACACCGCTTC TGCATTGCC ATATCCGTTT TTTAACCTTT  
TTGTCTCCGG GGAACCTCTC ATTGATTAT NATGTCTTCT GATGA

SEQ ID NO:2164: (Length of Sequence = 296 Nucleotides)

ATGTTTGTAA ATCACTTCTT TTTCCTACAA TATTTCTAAT AAGAAAGCTT ATAACAGCAC TTTATTGACA CCCTCGGACC  
CGGGGCAGGG TCAGCAAGAC TCCAGCTGG CATCAGACTG TGTCTGGCCT GCTGTGCCA TCCTGAGGG GTGCAGGACA  
GAGCCCCATA GGCAGAGAG GCTCCCTGG GACCAGAGGA GGATGCTGTG CAGCCAGGCC CATCCCCAGC ACTCGAGGCC  
TAGGAGGAGA GGTGGGCTCT GGCAGGGGT GTNAGGTGGC AGTGAGAAGC CAGGCC

SEQ ID NO:2165: (Length of Sequence = 310 Nucleotides)

GTTTTTGTAA TGTTCCTCAA ATAATGTTTT TCTGTGTGTG TTTTTTINCT TTTTTTGGAC AGGNTCTCAT TCCCATGACC  
CAGGGTGGAG TGCAGTGGTG CGATCTCAGC TCACTGCAGC CTTGACTTCC CAGGTTGAGA TGATTCTNCC ATCTCAGCCT  
CCCGAGTACC TGGGATTACA GGCACACACC ATCATGCCCG GCTAATTTTT TGTATTTTGA GCAGAGACGG GGTTTTGCCA  
TGTGACTCAG GCTGGTCTCG AACTCCGGG CTCAAGAGAT CCGCCTGCCT TGGCCTCCA AAGTGTGGG

SEQ ID NO:2166: (Length of Sequence = 361 Nucleotides)

GATGGAACT GGAAGAAAAA TAATTGTAA GCAACAATTT TAGATTTTTT TATGGAGGAT AGAGACATTT GAATCAGATA  
CCAAGAAATG TATAGTAATC ACTCACATAG AAAGATGTCT AAAATGGATT TTAAATGGGA TCGGGGAAAG CAAGGTGCTG  
AACACATGC TGTACATACT ACTTATAAAT CAAAGCAAAC CACTAGCAA CTGATGTCAG TACTAACACA GGTGGAAGTG  
GGATTGTGGC GGAGGGGAGA GGTAGTNAGG GTAGACTTAT TTGTACCAIT TTNATTTTTG ATATTTCTTT TATATACAGA  
TACATAAGTC TGTATATACA TGTATGTCCA ATTATCTCT T

SEQ ID NO:2167: (Length of Sequence = 325 Nucleotides)

TCCTGGGCTG TGCTCTGTTT GAAGGGGGCG CCTGCTCCC CTCAGATCAG TCAGGAGGAA GATGACTAAG GGGAGGGATC  
CTCTGGGTGA TGGCTCTTTC CTCTCAGGG ACCTCTGACT GCTCTGGGCC AAAGAATCTC TTGTTCTTTC TCCGAGCCCC  
AGGCAGCGGT GATTGAGCCC TGCCCAACCT GATTCTNATG ACTGCGGATG CTGTGACGGA CCCAAGGGGC AAATAGGGTC  
CCAGGGTCCA GGGAGGGGCG CCTGCTGAGC ACTTCGCCCC CTCACCTGCT CCAGCCCCTG CCATGAGCTC TGGGCTGGGT  
CTCCG

SEQ ID NO:2168: (Length of Sequence = 348 Nucleotides)

GGAGAACCGT TCGCGGAGGA AAGCGAACT AGTGTGGGA TGGCCACCAA CTGGGGGAGC CTCTTGCAGG ATAAACAGCA  
GCTAGAGGAG CTGGCAGGC AGGCCGTGGA CCGGGCCCTG GCTGAGGGAG TATTGCTGAG GACCTCACAG GAGCCCACTT  
CCTCGGAGGT GGTGAGCTAT GCCCATTC ACGCTCTCC CTCACTGGTC CCCAGTCCCC TGCTGGAGCA AGCCTATGCT  
GTGCAGATGG ACTTCAACCT GCTAGTGGAT GCTGTGAGCC AGAACNGNTG CCTTCCTGGA GCAAANTCTT TTNCAGCACC  
ATCAAACAGG ATGACTTTTA CCGCTCGT

SEQ ID NO:2169: (Length of Sequence = 392 Nucleotides)

ATTTTGTGA GGTCCAGTTT GGGTGGCAGA AACTAAGATA CTGACCTGAT GAGGAACTT GTTCTTTTTG GCGCTGCGCA  
TTTATTTTAT TATTTATTTA TTTATTTTTG TATTTTATGT AGAGACAGAG TTTCAACATG TTGGCCAGGC TGGTCTCAA  
CTCTGACCT CAAATGATCC ACCACCTCG GCTCCCAA GTGCTGGGAT TACAAGTGTG AGCCACCATG CCGGCCACC

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TGTTGCATCT TTAACAGCTG TGTTTGAAA AGGGTGAGGA ATTGATTTCAT CAATATTCAA TACTAAGCTG CAAAATCAGG  
AATGCAGCCA ATTGGTTTAA TTGATCAAGG CTTATAAACT CTTAAGGGAC TCTAGTGAAC TGATACAAAC TA

SEQ ID NO:2170: (Length of Sequence = 273 Nucleotides)

GTGTGTGTG ATGCTGTTGT TGTTGCTTTC TGTTGTTTT TCITGCAATG GTCAGGTCCC ACTCTGAACT CCGGGGGGCA  
CCAACTGAT GCCAGTAGGA TTGCCCTTGT ATAGGGTGTC TGACAACCCC TGTTGAGGGT CTCACCCTGT TGGGTGGCAC  
ATGGAATAGG ACCCATTTAA TGAAGCACIT TNCCTTGG TGGAGGTAGT GTGCTTTNCT GGGGAAAAAC CCACITGTCT  
GGGCTGCCCTG GATTCTCTAG AACTACCAGG AGG

SEQ ID NO:2171: (Length of Sequence = 357 Nucleotides)

GTGATGTACC CCAGCACTAG GGAATGATGT GAGTAAGACC TAATCCCTGC TCTCAGGGAG CTTATAGCCT ATGGCAGCAG  
CAACACTAGT AAAAATTTAC TACTTTGATA GGTGCACATC TTCTTTTGGT CAGCAATTTT CTCAAAACCA CTGTAACATT  
TTACTAAAAT GCTAAGCTTT GATTGTTTTT CAACTACTTC TTGAGAGTTT CTGCATGTAT GATAAGGGCA AGACATTACA  
CTGAGGTATT GATGCTGATG AGCAGCAAGG CTCCTGGCT GGTGAAGGGA TACTGATTAG CACACCAATG TGCTGCTCTT  
GAACACACAC CTCCACAAA TTACAAATTA TCTTCCA

SEQ ID NO:2172: (Length of Sequence = 381 Nucleotides)

GAAGAAGGCC CATGGAGCTA AGGCCTCAGA ACACCAAAGT CTGGACTGTC TGAGGGCACA TGCTAATAAC AGGAGGCTGG  
CAAAGTGGCC AGCTCCCATG CTTTGCATG CATTINTCTT TACCTCCTGC TGCTGGGAA CATCCTTCCA GGAGCAATCG  
AGTCAACAGC ACCACAGACA CTGCTATTCC GTTGAGAAAA GTTTTATATG GAAACACATA CTGATCATGA ACACAATAAA  
CAGGAGGGA AGCTCGGGCT CAGCCAGGAA ACCTGCCACA AGGAAGATGT TTGGAAGTAT CCAGGAGTAG TGTCAAACAC  
TAACACCATA TTTACAAGTC TAATTGGAA CCTGGGCCCT TTTAAGTGC AGGAGGAAGT T

SEQ ID NO:2173: (Length of Sequence = 351 Nucleotides)

GAAGTTCGG GAGCGCTGA AGGAGCTCGT GGTCCCCAAG CACGTCATGG ATGTTGTGGA CGAGGAGCTG AGCAAGCTGG  
GCCTGCTGGA CAACCACTCC TCGGAGTTCA ATGTCACCCG CAACTACCTA GACTGGCTCA CGTCCATCCC TTGGGGCAAG  
TACAGCAACG AGAACCCTGA CCTNGCGCG GCACAGGCAG TGCTGGAGGA AGACCACTAC GGCATNGAGG ACGTCAAGAA  
ACGCATCCTG GAGTTCATTG CCGTTAGCCA GCTCCGCGGC TCCACCCAGG GCAAGATCCT CTGCTTCTAT GGGCCCCCT  
GGCGTGGGTA AGACCAGCAT TGCTCTGGTC C

SEQ ID NO:2174: (Length of Sequence = 308 Nucleotides)

TCATTAAATA GCTTCTATGC CACACTCTGA TTAAGCCGAC TGAGGTCCCT GGGATCTGGG TCACTGGACC GAGCTGCTCG  
CTCGGTGGCT CCACTGCCAG GTCCGGGCGC GCTCCCCACA GCGTCAGTT CTGGCCAGA CAGGGCCTGA CATCCGCCGC  
CTGCAGTCCC GGGGTGGCCG TCACCGTTC ACGGCCAGNG ACTCTNCCTG CTCGTCCGGG AAGGCGATGT CGAAGATCTC  
CCGGTAGTNT TCCACGAAGG TAACCTCCAG GGCCCTCGGT GATGAAGGCT TCCAGGTCGT AGAAGTCC

SEQ ID NO:2175: (Length of Sequence = 403 Nucleotides)

CTTGCCCAAG GGCTGAGCT GGTGGAGGCA GAGCAGGAGT TGGATCCAGG CCTGTNTGAG GCATCCTGCC ACCTCCATCC  
AGACCTGGAG CAATCCCTGA GAAGGGTGGC TACCACAGA GAGTGGCAG CTCTGGTCTC AGGAAGCATA GCCGGAGGAT  
GTCCAGGCC ACCAACAGC CATTATCAG TAAGGAGCA GAGTNGGCG TCTAGTTCA GCCCCGGAA GGTGGTCCAG  
GGGCAGCCAG TNCAGAACTC AGCAGGAGCT CAGTCCAAC TGAGCTGAT TTCCTCCAG TGTCACAAG GGACATCCTG

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ACCTGGAGGT CCTCGGCTAC TCACCCTGGG GCTTCTTGC ACAGCCCAGG AGCTAGCCCA GGGCTGCCTC TAAATGGTTC  
CCG

SEQ ID NO:2176: (Length of Sequence = 399 Nucleotides)

AGGCAACTAT TGAGGGAAGA GGCAGAAAAA GGAAAAAGGA ATGTACGTAA GGCAATTTIN CTTAAAAGTA CAATAAGCTT  
AATAGTGTIT TAGGAAGACA AGATAAAAAAT TACTCAAGGC TAGCTTGGTT CTCACTGAAT AAAAACAAAG GACTAAATAC  
TGAGCTCCTT CTGTGTGGAT CTAATAATCA ATGCCTTGGT CGCTATATIG GTAATCTCTG GGGTAGTCAT CCTGGTACTC  
GCCATGATAC TCATCAGGGT ATTCTGCCTG ATAATCACTA TCATGATTT CCGAACCATT TGTTCCCTGTT CCTTGGCTTC  
CGTTGTGAAT GACAGGTTC GTAGGAGCAG CACAGTATTT GGGGATCATA TACTTGCCGN CCAAGGCCAT ACAAACTCA

SEQ ID NO:2177: (Length of Sequence = 302 Nucleotides)

GGTTTTTATA AAAATCAGAA TTTTTCAAAT GCATTGGTCA TTTTCAGATG CATTGGTCAC ATTTCAATTAT TCCATATCAA  
AAAACATGCAT TTGTTAATGT CACACAAATC TCATTGGAAA GGTCTTCAAG TATTGTGAAG TGTCCAGGT CACAAAGATG  
AATGCTAGTT TTTCAAAATT CTACTTTTAA CTGAATGCT CAAATCTTAT AATTGGTAAC CCGTTCAGTT TTTCTTTAGT  
TGATAGGCTT ACTGCTTTTA TGTGTTGAGA ATACTTGTCT GTGAAACATC CAAATCTGGA AG

SEQ ID NO:2178: (Length of Sequence = 343 Nucleotides)

GGTTTCACTC TCCTTGCCCA GGCTGGAGGA GCAATGTCAT GATCTTGGCT CACTGCAACC TTCTCCCTTC CAGGCTCAAT  
CAATTCCTCT GCTCAGCCT CCCGAGCAGC TGGGACTACA GGTGCGTGCC ACCATGCGCA NTAGGTTTTT TTTTGTAGA  
GACAGGGTTT TGCCATGTTG CCCAGGTGG TCTCCAACCTC CTGAGCTCAA GTNATCTGCC TGANGTCTG GGATTATAGG  
TGINAGCCAC CACATCCAGC CTCCTTTTAA TGTTTTGTG ATTATTTATA GTGAAAGATT TAAATTCCTT TCTATTTCTT  
TGTGGTATAT ATTCTATAGG CTA

SEQ ID NO:2179: (Length of Sequence = 377 Nucleotides)

AGATCATCAG GAATTAGATT CTCATAAGGA ACACACAACC TAGACCCCTC AGAGGTGCAG TTCACAGTAG GGTTCATGCT  
CCTATGAGAA CCTAATGTTG CAGCTGATCT GACAGGAGGC AGAGCTCAGC TGGTAATGCT CACTCACTG CTGCTCACCT  
CTTCTGTGT AGCTCGCTC CTAATAGACC TGTATGTGTC CATGGTCTGC GAGTTGGGA CCCCTGCAGG AAGTCTTGTA  
AATGCATGTC AGGAACTTA CTGTTTACAG CCACATAGTT TGTAGTAGTA AGGAACTAG GACAATTCAA ATATTCACTA  
NNGGGAAAAC TGGGATAAAT TGTGGGTCAA TTTATATGT TTCATACAGG AAAAAAG

SEQ ID NO:2180: (Length of Sequence = 195 Nucleotides)

GATATTGCT TTTCTCAGAA CCATAATCGA TACAAGATGC AGTGACCAAT TCATTCCITA AAACACCTGG GCTCCTTAAG  
CGGCTAGAAG ACACAAGTTA CATCCAGCCC ATCAGGGAGC CAGAGGNGA GGGGTCCCCA GCCAAGCTCT GENCAGGCTT  
GCCATGGGGC AGNGCCTGAC CGTNCAGCCA GAGGT

SEQ ID NO:2181: (Length of Sequence = 244 Nucleotides)

TTGGGTGGGA ACGGGCCCGG AGCGGGAGGA ACGTGACTCC CCAGAGGGAA GATGGGCATC ATACTGGGCC CAGAGCTGGG  
AAGGAGTTGC TGCCAGCACA GGTGGGCTT GGAATCCCTT CGCCCCCTACC CCCAGTGGTT GTGGCTGTAG CCTAAGCCT  
GGAGAGCAGG ACCGGCCCGG GGTGTNTNGN AGGCTGCCAG GTGCCTCCA GAGCTCCAA GGGCCCCAC CTGCAAGTNC  
CAGT

SEQ ID NO:2182: (Length of Sequence = 287 Nucleotides)

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CTCCTTGAGT CTGTTGACAC GTCACATGGT CAAAGTCTCC TCAITTCAGC CAGTCTCAAC ACAAACACC CAACAGGGAT  
GCACTCAACT TGTGGTTCC ATGTGGAAGT AGGTGGCAGG GCGAGAGGGA AAGTAGTAGA AGGGGGCTAT GGTGTGTCTG  
CATTCAGTCC CCTCACATAA AGCCACATGG ATCTAGGGGG GTATCCAAGA GCTCTGGTGG GGTCCGTGTT GCACCTAAGA  
CATTATAGGT CAGAGCAAGT TGCTCAGAGG GTTCAGGCA GGGGGCT

SEQ ID NO:2183: (Length of Sequence = 389 Nucleotides)

GATCCAGAGA GGGCTCCAGG TGGAGTCCCT TTTCTGTCAT AAGGGGCTGT GACCGAAGCA CAGAGGGGAA AAAAAAAGT  
GGTGGGAGCC TCCTCTGGTT TCACCTGAAG AGGGAGGTGG AAGGGCCTGA AAATTAGATT TTTTATATAA ATAATAGATA  
TTATAGGTAT ATTTNCATAT TTTTACATAA TGATGCCAAC CACAAACAAT GGACCATAAA GCACTGACCT CAGAATGATC  
AATGCAAAA TGTTTAAACC CTGGGAAGCT TTTGCTTAGG AGGGCGGATA TTCTGTGTTG ATGTTATTCT ATAGCCATAA  
ACTTCCCTGA ATTTNCTGCT AATGTATCCA AGTCCAGGGA AGTCACTTAA AACTCTTCAA ATGCAGCTT

SEQ ID NO:2184: (Length of Sequence = 383 Nucleotides)

GCAAGAGAAG CGGTTTGGGT CTCTGAAGGA AAGGCCAAAA CCCAGAACAA AGAAGAATCC TATGACTTCT CCAAATCCTA  
TGAATATAAG TCAAACCCCT CTGCGTTCG TGGTAATGAA ACTCCTGGGG CATCTACCAA AGGTTATCCT CCTCTGTG  
CAGCAAAACC TACCITTGGG CGGTCTATAC TGAAGCCCTC CACTCCCATC CCTCTCAAG AGGGTGAGGA GGTGGGAGAG  
AGCAGTGAGG AGCAAGATAA TGCTCCCAA TCAATCCTGG GGCAAAGTCA AAATATTTGA GGAAGATGGN TCCACAAGGC  
CAGGTTACAG AGGAATGCAA GGAGCTTCCA GGAAGCACA GAATTCAGG TTTTCGGAAA TTT

SEQ ID NO:2185: (Length of Sequence = 359 Nucleotides)

CTTTAATTCA CATCACAGCA GTCAAGGAAG TGGGGAAAGG GGAAAAAAT CAAGTGGCAG ATATTTACAT CTAAAATTCA  
CAITACTTGT TGGATTTTGA ACATGCTACC ACAATATATA CAGTAAATA CCTCTGGGA CAATGGTACA AATTTTGT  
CCTTAACTT TGCTTTCTG GTACAGGTAA GATCATTTT AAATCACTT TTNCTTTAA ACATGAATAC ACAAAGAAA  
TGGTTAGAAG TTTCTTGT TTAATAAGC ACAGAATGCG GGAGGTTAAA AACACATTTA TAGTGTGAA TACCAATTGG  
NCATCACT CTATACATTT TTTGCTCAA TTCTGTAC

SEQ ID NO:2186: (Length of Sequence = 337 Nucleotides)

ATAGTTATAC TCAGTGAAAT TAACAAGACC CAAAGGTGTT ATGTCTAGG AATAAAAGG ATAATTTTGT TTGTTCAAA  
AAGTAACTTG TCTAGACCA CACATCAGAA AAACACAAA ATAGCACT CTAGTTCTAA ACAGCTATGT CTAAAATAGA  
TTATATAGTA AAACCGGTAT TATACAGCAT ATTGTGGATT TGATAAACAG ATAAATATTT GCNCTGAGTA GGCTGTTTAT  
AATATAACAT TTNCTTATCT ATACAGAATG AAAGCCAAA AGTTAACTGT ATAGAGATGT GCAGAACAAC ATTAATATT  
ATGGCTCAA AGCAGG

SEQ ID NO:2187: (Length of Sequence = 329 Nucleotides)

GCATTINTCA GCACAGATAG AGCCCTGTCC CTCACCTAG TGCCACTCC ATGACTGTA ATAATAACAA TAATAATAAA  
ACTACTGGCC AAGCAGGTG GTCATGCCT GTAATCCCAT CACTTTGGGA GGTGAGGTG GGCAGATCAC CTGGCCCAAC  
GCCACCGCT CTAGCTCCG GTCCTGTGAG GTCCCAAGT CCTTNNCCG TCCACGGCT CCCACGNTGC CACCTGTCC  
TGACTCGCA CCTGGTCTG TGGCAGACT GCTGATGAG TTCACCTCAC CCATGCCCT GGAGGCGGT GCAGAGGGAG  
AACCAGG

SEQ ID NO:2188: (Length of Sequence = 335 Nucleotides)

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GGCCCCAGCT CCTCTTCTG CCTCTTNAT GGCTTGGGCT GGAGTGGGCT CTCTGGACCT GACCGGGGGT CAGACTGTGG  
 GTCCCTGGGT CTCTGCCCCA CTCINACCGG GCTTCTCTCC TCCACGCTTA GGGTCTGTCC CGGGTACTCA GTCAGCCCCAG  
 TGGGATCTTA CCCACTTCCC TGCAAGGTGC ACCTGCCCCA GGCTCAGGCT GOCAGCGGC TCTTCTTGA CAGTAAGAGC  
 AGGGCTGGGC GCCTCTTTC TGGCCCGGAA GCGCAGGGG CCCCTCTCC AGAGCCTNGG CGCAAGGAAC ACAAGGCTGC  
 CGCTGCTCTT CCAGG

SEQ ID NO:2189: (Length of Sequence = 366 Nucleotides)

AACTGGTGA TCAGATCGAN TTCTACTTTT CTNATGAAA CCTGGAGAAG GACGCCTTTT TGCTAAAACA CGTGAGGAGG  
 AACAGCTGG GATATGTGAG CNITAAGCTA CTCACATCCT TCAAAAAGGT GAAACATCTT ACACGGGACT GGAGAACCAC  
 AGCACATGCT TTGAAGTATT CAGTGGTCTT TGAGTTGAAT GAGGACCACC GGAAGGTGAG GGAGGACCAC CCCCCTCCCA  
 CTGTTCCCA ACGAGAACCT CCCCAGCAAG ATGCTCCTGG TCTATGATCT CTACTTGTCT CCTAAGCTGT GGGCTCTGGC  
 CACCCCCAG AAGGAATGGA AGGGTGCAAG AGAAGGTGAT GGAACA

SEQ ID NO:2190: (Length of Sequence = 333 Nucleotides)

CTGCGATCCA GCCTAGGCAA CAGAGTTGAG ACCCTATCTC AAAACAAACA AAACAGCCAG GCACGGTGGC TCATGCCTGT  
 AATCCAGCA CTTTGGGAGG TCGAGGTGGG GGGATCACT GAGGTCCGA GTTCGAGACC AGACTGACCA ACATGGAGAA  
 AGCCCATCTC TACTAAAAAT ACAATATTAG GGGGCGTGGT GGTGCATGCC TGTAAATCCCA GCTATTGGG AGGCTGAGGC  
 AGGAGAATCG CTTGAACCTG GGAGGCGGAG GTTGCAGTGA GCCATGATTG AGCCATTGCA CTACAGCCTG GGCAAGAGCA  
 AAATCCGTC TTC

SEQ ID NO:2191: (Length of Sequence = 284 Nucleotides)

AAGTTTATAA AAGTTTGATT ACTGGAAAAG TTCATCTAA TTCAGAAATT TCAGGCCAAA TGAAACAGCC CCTTCAAGCA  
 AACATGCCCT CAATCTCTCG AGGCAGGACA ATGATTCTTA TTCCAGGNGT TCGAAATAGC TCCTCAAGTA CAAGTCTGT  
 TTCTAAAAA GGCCACCCC TTAAGACTCC AGCCTCCAAA AGCCCTAGTG AAGGTCAAAC AGCCACCANT TCTCCTAGAG  
 GAGCCAAGCC ATCTGTGAAA TCAGAATTAA GCCCTGTTC CAGG

SEQ ID NO:2192: (Length of Sequence = 260 Nucleotides)

ATGACGACGG CTACCTCGAG GTCAITGGCT TCACCATGAC GINGTGGCC GCGCTGCAGG TGGGCGGACA CGGCGAGCGG  
 CTGACGCACT GTGCGAGGT GGTGCTCACC ACATCCAAGG CCATCCCGGT GCAGGTGGAT GGCGAGCCCT GCAAGCTTTC  
 AGCCTCACGC ATCCGCATCG CCCTGCGCAA CCAGGNCACC ATGGTGCAGA AGGCCAAGNG GCGGAGCGCC NTCCCCCTTG  
 CACAGCGACC AGCAGCCGGT

SEQ ID NO:2193: (Length of Sequence = 247 Nucleotides)

GGTCTCAGCA CTCGCTGGGT GACCGCGGG AGCAGGCCAA GGAGGGCTCC CAAGTCCGTT CTGCAGCACT GGGGAGGGA  
 ACAGACCCAG GNTCTGGGA ATCTCTTCT GCCTAGCTTT GCCTGCCTGC CAGAGCAGGG CCTGCGGTTT GGGTCTGTIN  
 ACCNTCCGGG GGCGGGGAA GGGCAAGNA GGCGGATCTC TGAAGTCCG CCCAACTTCG CTNCTGATCC CCCAAGGTCA  
 GAGAGGG

SEQ ID NO:2194: (Length of Sequence = 399 Nucleotides)

CTCCATCTC CCGGTTCAA GCGATTCTCG TACCTAGGC TCACAAATG CAGGATTAT AGGTGTCGGT TTTCAACCT  
 AGCTAATTT TGCAATGTTA GCAGAGATGA GGTTCGCCA GGTGGCCAG GCTGGTCTTG AACTCCTGAC CTCAAGTGAT  
 CCACCCACCT TTGTGGCCT CCCAAAGTGC TGAATTACA GGCAACATGT AGCCTTTGAG TCTAGCTTCT TCCACTAGCC

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TAATTCATTT GAGATTCCAC TCGATTCTAC TTGAGATTCA TCCACATTGT TGAATGCACA TTCTTTTITA TTGTTCCTGT  
AGCATTCTGT TGTGCAGCTG TGCCCCAGTT TGTTTANCTA TTCACTCTCA GTTGTTTCCA GTTTTAATGA CAACTTCAG

SEQ ID NO:2195: (Length of Sequence = 172 Nucleotides)

TCAAAGTCAG CTTCCTTGACC TGCAGGGCTT CAATTTGTGG CTGACAGTTT TAACTCAGAA AATCCCTGAC TTGATTGGCT  
ACATAAATNA TATGINATAT AGCCATTAAG ATCATGGTTT TGGAAAGTAT TTTAATGATA CAGGAATGTG CTCTGAAATA  
ATAAGTGGGA CT

SEQ ID NO:2196: (Length of Sequence = 398 Nucleotides)

GCAAAAAA AAATTATTAT CTCCACTTTA CCAGTGCTGA CACTTCACCA ATGTAGGGCT CTCAGTGACT AGCCCAGGGT  
CATGCACAGC CTGTTTCAGC AGCTACCTTG GACTTGAACC CAGCTCGGTC TGTCGTACTC AATGCCTATA GTCTTAACCT  
TTCCAGCAGC TGCTTCTTTG TCAAACAGGT CCTCCCGCAG GTTTTCACAG CCCAGCCCTT TACTCAACAA GTATTTATTG  
ACAGGCCTCA GGAACACTAG GCAAGTAGGA TAGCAATGAA CAAGATGCTG ACCTTGACCT TGACCCCTGCA TCCATAGTAT  
GAGCATTTTA ACTGGGGGAG GGTTTGCAA GTTCTCTTAA ACAGTCTACT ACATGCTCTG TAAGCATTTT CTTATGGG

SEQ ID NO:2197: (Length of Sequence = 313 Nucleotides)

GTCCCTTG TG CATTGAGTGC ATCCCCGCTG GTGACTAAGC TCGCAGCAAG CGGCTACCCC CCGATCTGCA AAAGGGCCTC  
TCCCTTTG TG TTCTATACAT TGTGAATCTT CCCGTCTGAA GAACGCCAG CCTGCCCAGA CAAAGCCCCG CCTTNCCCAA  
AGCAGAGGGG CTGTCTGTGT CTCCAGAAAG GGGACATCGG GGGGGAGGGG GGCTCAGAAA GGAGAAGGGC TGTGATCTCC  
GGTCCCTTCC CCCATCATCC TTCTTAGAC TGATGCTTTG ACTGAATCAT CACTAGCTAT GGGCATTAAA AGG

SEQ ID NO:2198: (Length of Sequence = 360 Nucleotides)

GGTCTACTA TGTGCCCCAG GCTGGTCTCA AACTCCTGTT CTCAAGCGAT CCTCTGCCT CGNCTACCA AGGTGCTGAG  
GTTACAGCG TGAGCACTGC ACCTGGCTAG GAAACTNAGT TTTTTCAGTG GTAGAGGCTC CTAGCCAGTG GCCAAGGGAA  
AGAGAGAGTT CTGGGTTTCA GGGCTGGCAG GAAGTCAGCA AGACACCAGG GACTGGGCTC CACTGGCTGG ATCTCAGGGA  
AGAGCAACTG CCACAGTGGG GACCTGGAAC ACAAGGGAA ACTGAGGCAG CAGCTGCACC ACAGTTTACA AGTAGAAAGA  
CCATGCTTGA GGACAACAGA AGTTTCACTA AGGATGCACG

SEQ ID NO:2199: (Length of Sequence = 374 Nucleotides)

TTTGGGTAG TACCCTTGCC CTCTTCATGG CCACITCAAA GTGAAGCCAG CAAAGTGATA ATACTTTATC ATTTAGTATT  
ATCATAAAGT ATTAATACIT TGTCTATAAG TCCTCCTTGA GCCCAGGGAC CATGGAAGTC AGCTAGAAGA GCCCTGAGCA  
AGGAGCAAGG ACTTGGGCTT CTCCAGCCTT TGCTCCTGGC TTGTTTGACC TTGACTCATT CCCCATATGT CTTTGAGGAG  
GCTCAGAAA TACTAAAGCT GGGAGGAAAC TTGGAGATCT ATAGGTCAA CCTCCCCATT GGGCTGATGA GAAAATACAC  
GCAGGCCTAG CATGGTGCCT GCCACCATGG TGGATCCAG TATGGTTTTA TAAA

SEQ ID NO:2200: (Length of Sequence = 416 Nucleotides)

CTACTAAAA TACAAAAATT AGCCAGGCGT GGTGGTGGGC ACCTGAAATC CCTACTCAGG AGGCTGAGGC AGAGAATCGC  
TTGAACCTGG GAGGCAGAGG TTGCACTGAG CCGAGATCGT GCCACGAC TTCAAGCCGG GTGACAGAGC GAGACTCCAT  
CTCAAAACNA ACAAGC AA CAAACAACAA CAACAAAAA TACCTCTTGA CTTCTAAAGA CGCAAAAGTG GCTAAAGTC  
CAATACAGTA TTGTGTTTAT TTACATCTAT TTTAAATGCA TGTGTATCTG TAAATNCAA GTGATTCGTG ACTCATTTGC

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TCCTCAGTCT ATAGCATTAT TAACTTTCTA GGAGCAGCAG TGGAGTAGAG TGGTACTGAA TTGGTCACAG ACTTCATCCG  
ATTATCAGGA TCCTGG

SEQ ID NO:2201: (Length of Sequence = 315 Nucleotides)

GAAACCAATA TAAATTTCAA AATAAACCAG CATACAGACC AATTGCAATT TATAGAAAAA ATAAAAATGT AGAAACATCA  
CCTCCTCTCC CCGACCCCAG TACTGAAAT ATACTTCCTC AGACATACTG CCCCATCACT GGGAAAGGGTG CCGACAGATT  
GGGTACATTT ATAGANTATT AAATAATTAA GTAACAGAGG CACCGTTTTT GCATGTATGG TCCCAAAGAC TTTTCAACTT  
NTTTTCAAC ATTACAGTGG TTAAGAATGG AAATTGAAGG AATTGTACAT ATTTTCACTG GCAGTTTCTT ACAGA

SEQ ID NO:2202: (Length of Sequence = 328 Nucleotides)

GCCTCTGCAC TCAGCCTGGA GTGCAGTGGT GTGATCTCGG CTCACTGCAA CCTCTGTGTC GCAGGTTCAA GCAATTCTCA  
TGCTCAGGC TCCTAGTAG CTGGGATTAC AAGCATGCGC CACCATGCC AGCTAATTTT TGTATTTTTA GTAGATACAG  
GGTTTCGCT TCCTGACCTC AAGCTATCCA CTGCTCTGG TCTCTCTCAG TTCTGGGATT ACAGGTATGA GCCACCATGC  
CTGGCCGGAA TATATATATT TTTTACCACT CTATTTCCAG TGCTAGACT AAAACCCAGC ACATGGTACA CGTCATACAT  
AAGGAAGG

SEQ ID NO:2203: (Length of Sequence = 268 Nucleotides)

ATTTTGTGCT CGTCGCTCAT GCCACCACTG GGACCNACGG GGT CCGG AGTGGTTTTT CTGGCTTGTT TCAGCCTTTT  
CAGGCTCTCT TCATCTTCT TCACAGATT TAATACATCT GACACGGTTT CATAGTACTT ATGAGTGCTT TCACTGAGAG  
TGCTTCTAG CCACTGCTGA ATTATTGCTT GTTTGAGCTT ATCCTTGTTT CCGCTCTGAA GCTGGAATAA GGGCTTCANA  
GCACTGTCCA CATAGGAGGA AGCTTTGG

SEQ ID NO:2204: (Length of Sequence = 353 Nucleotides)

GTAAATCTNA GGTCAAGGAT GTCCCATGAT GGATGATGAC TGANATGGAC GGAAGTTTGG TTTGAAGCGG TGGCATTGGT  
GCAGGCTGGC AGAGGGGGCA GTTCTGGATA GAGTGCTCTG ATGAATGGG ATACTCATGG GAGGTGATGC AGATGAGGAT  
TCINTGCTTC TNAAGGAGGA GCCAGGCATT TAGAATGGCA CTGGAGAGCA AGGACTGACT GANCCCCCTC ACTGTGTCCC  
CAAGAGGCCA GGAAGGGAAG ATTGGAGGAG ACAAAGTTGA AGTGAGTTTT CCAGGGAACG AGTCAGTTAA GAGATGGTAG  
GATCTTAAGG GAAGATGGCT AAGATCTTAA GGG

SEQ ID NO:2205: (Length of Sequence = 265 Nucleotides)

GTTCACCAT GTTGGCCAGG CTGGTCTCAA ATTTCTNACC TCAGGTGATC CACCCCTCCT CAGCCTCCCA AAGTGTGGG  
ACTACAGGCG TGAGTCACTG CCCCCAGCCG TGGTTTTTTT TTTTATAGAA CAGTGTTTTG CCATGCTGCC CAGGCTGGTC  
TCAAATCCAT AGGTTCAAGT GATCTCCCCA CCTCAGCTC CCAAAGTGTG GGGACCACAG GCATGAGCCA CCATGCTTGG  
CCAGAAAGAA GTTGTAAACA AAATG

SEQ ID NO:2206: (Length of Sequence = 340 Nucleotides)

GCAAAGCTTA TTTTTTCAGT TGTGGGCTCT AGTTTGGTGT GGAAACTATT TCCTTAGACC TGGGTCAACC CTCGGGCTCC  
CTTAATCTCC CGCCATATGT TCTCCAGAAT CAGGGCATGG TGTTCGTCCC TGGTGGGACT CAGCCCGGTT GCTTTGCACA  
GACTCTGGGC CAGGGCAGGA TGTGGTGTG TGCCGGTGTG TGCCCGGTG TTATCTGTGG CGCTCAGTAT GGTGCATAGT  
GTGACACGT GCCCTAGGAG GTTCTTAATG GATCTGCTA AGACTCAGNC AAGGCAGGCG ACAGTGGCTC ACTCTATAT  
TCCCAGCACT TTGGGAGGCT



SEQ ID NO:2207: (Length of Sequence = 348 Nucleotides)

GTGTTTGTTC CTCTTCCAC CATAATTGTA AGCTTCCTAA GGCTCCCCA GCCCTGTGGA ATTGTGGATC AATTAAACCT  
CTGTCTTTTA TAAATAACCC AGTCTGAGGC AGTTCCTTAT AGCAGCGTGA GAATGGACTA ATACACCTCC CTCTTTGAGT  
CTGGAAGAAT ATGTGAAGGG AGATTGCTAA GGAATTATTT ACAGAATGGT TCTTAAAGTG CTTGGGCAAG AACTATGTAT  
TTNTGGAGGC TGGTAGTGTT TCAGTGAATC TGAAAACCTT TGTGACATGT GAGAAAGGTA TGCTGTCTCT GAAAGCTAAG  
TGTATTATGA AGGATCTATA AAGGGCCA

SEQ ID NO:2208: (Length of Sequence = 154 Nucleotides)

GAATCTGCT GTGCACATG CTTGAGATG CTAATTATAT CTTTGGACTG TTTGTACAAC CATTGACAAA TATACTTACT  
TTCAATTCTG CTAATGCAAC TGAAAAGAGC ATTCTGTAAA TTGAAGAAAA ACAATAAAC AGNAATTAAC AACC

SEQ ID NO:2209: (Length of Sequence = 352 Nucleotides)

GAGGTTGAGA ATCTCCATC CAGCATCTC CTTGGTCACA TGGTCCCAAC CTTTGTCTCC ACCCCCTTCT CTGTTCCTCC  
CGCAGTCCAT GCTCCAGCCA TCCTGACTCT GTCCCTGGAT TTCTGGCTTA CTGACACCTG AGCCTGTGCA CAGGNCCTCC  
CTTCGTATA GAGCAGCCTT CCCATCTTGT GGACTTGTCT CCCATCTTGT GGACTCGGAG GGTTCGGAGC AGCCGTTGAG  
GTGANGCTCC TATGACACCT CCNCGTGAA GCCTNCTCA CTTTCCATT ACCAGTGAGG CCGCCACAG CCGATTGTGT  
ACTCTGATCC TGGCAGCAT GGAAGCCATC TT

SEQ ID NO:2210: (Length of Sequence = 338 Nucleotides)

GTCTTCCAT CAAGAGTCAA TGTATATGCA AATATAGACT TAAGAACATA AGCATCTGG TTTAATGTTG TTGTGAGCCC  
TGTGAAATA AATTAAGCT CAGTGAATGT TTACAAATCA ATACATAGTA ATCTATATA TGAAAGCTAA GATGTATAAG  
ATGTTTATAA ATTTCCTATT AGAAAATACT GCTTCTTAA AGGTGATTTT AAAAAGCTAG CTGATATCTG ATGGCTCAAG  
CATCCAGAAA ATGTATGCAA TGATAAGNCA TTGACTAGGA TGAACAGAAA AGGGATACAG GAAAAGTCCG AACACATGAA  
ATTCTAAATT AACCAAGA

SEQ ID NO:2211: (Length of Sequence = 353 Nucleotides)

GTTCCTGGAG TACCCTCTTC CCCCACCCC AGACCTGCTT TCAGAGCAA ACTCAAGTCC CTCTTCCTCC GTGAAGCTTC  
TCCCTCAGCT GAGCAGTGAT CACTTACTCA CTCCTAACCC CAATCCGCTG ACTGGGTGGG GACAGCACGT CCAGCCTTCC  
CACCTCTCCT GCAGGCTTCT AGACGGAGTT TCAAAAATG ATGAGCCTCG ATCCAGGGCT TGAAAGAAGC CAGGGTGTA  
TCTTGTTCAT GCATGCNTCC CCAGAGNCTC GCCCAGTGCC TGGNACATAG TAGGCACTCA ATAAATGCTG AATGGGTGAA  
TAGTTGAATG ATAGGTGCTC AATAAATGAA TGA

SEQ ID NO:2212: (Length of Sequence = 293 Nucleotides)

GAGAAAGGAG GCAATCTCAG TCTCGTCTC CAAAAGGGA TACTACTAGG GAAAGCAGAA GATCTGAATC ACTGTCCCCA  
AGAAGAGAAA CTCTAGAGA GAACAAAAGA TCTCAGCCAA GAGTGAAAGA TTCTTCCCCA GGAGAAAAAT CCAGGTCCCA  
GAGCAGAGAA CGAGAAAGTG ATAGAGATGG GCAGAGGAGA GAGAGAGAAA GGAGANCCAG AAAGTGGTCT AGGTCCAGAT  
CTCATTCTAG GTCCCCCTCA AGATGTAGAC CAAAAGTAA GAGTTCATCA TTT

SEQ ID NO:2213: (Length of Sequence = 423 Nucleotides)

NATTAACACC ACAGTGATAA ACAACTTTAA GCTTATGTTT CTTTATAGAT CACTGGCTCA CACATAATTC AAAAACCACA  
CAGAAGCTAA GAGTCTTTAC ATTAAATATA TTCTTCTTAA AAATCCTTAC TGTATGCATC TGTCTCAAG CAGTAAATTT  
TGATTATGCA CCATTTTATA ATTAATATGT CACATTTACA TAGCAAAATA ATGAAGGCAC AGCTAATACA AGCAAACTTA

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AACCCCTTCT ACTTCTGAGC TGGGGGTAGG GGCACACACT TGGGATTGGT TCTTCAAGTA TATATTTTIN CCAAACATTA  
GCTTCAGTGA AGAGTTCTGG ATGATTTTCA CAGCTACACC CCTAAAAGCT ACATGGACAG AAAGACGTCA CAAGGCGCAA  
GGTACATAAC GGTGGGTACA TAT

SEQ ID NO:2214: (Length of Sequence = 259 Nucleotides)

GTCATGGAGA TCCACAGCAA GTACTNGCGC TGCTGCAGG ANCAACCTCC ACAGCGGGGC GTTCTCTGAT CGAGGCTCAG  
ACTTTCGAGA ACGAAGAAGC CGAGACGGTC ACCGCCATGG CCTCGCTNTC CGTGGGCGTN AAGCCCGCCG AAAAGAGACC  
AGATGAGGAG CCCATGGAAG AGGAGCGGCC CCTNTAGCAC TNCCTCGAAG NTGCTGTCT CTGTCTGTCT TGCTCTGTCT  
TTTAAGCTCA GCCAAGAAA

SEQ ID NO:2215: (Length of Sequence = 378 Nucleotides)

CACACATCCT CACCCACAG AAAGTGTGG ACACACTGAA GAAACTGAAT AAAACAGATG AAGAAATAAG CAGTTAAAAA  
AATAAGTGGC CCTTCCAAA CAGNCCCCA TCCCACAGCG CTCCGCAGCT TCCCACCACC GCCCGCTCA GTTCTTTTGC  
GTCTGTGGC TCCCAGCCC TGCAAGCCCT GGCTGGCACT GTTGCCGCTG CATTCTCGTG TTCAGTGATG CCTCTCTCTT  
GTTTGAANCA AAAGAAAATA ATGCATTTTG TTTTTTTAAA AAGAGGTATC TTAATACATN GTATCCTAAA AAGAGGAGCT  
CATGTGGCAA TTGGTGACA GCAGGAGGAA ATTTCTTGGG ACTTNTTTAG GNTGAATT

SEQ ID NO:2216: (Length of Sequence = 428 Nucleotides)

GAACCCACAC TGGGGAGAAA CCATATGAAT GTAAGGAATG TGGGAAAGCC TTCAATTATT CCAACTCATT TCAGATACAT  
GGAAGAACTC AACTTGGAGA GAAACCTAT GTATGTAAGG AATGTGGGAA AGCCTTCACT CAGTACTCGG GCCTTAGTAT  
GCATGTACGA TCTCACAGTG GAGACAAGCC CATGAATGT AAGGAATGTG GGAAATCCTT CCTTACATCC TCACGCCCTA  
TTCAACATAT AAGAACTCAC ACTGGAGAGA AGCCTTTTGT ATGTGTGAA TGTGGGAAAG CCTTTGAGT TTCCTCAAAT  
CTTAGTGGGC ATTTNAGGNA CTCACACTGN AGGAGGAAGG CCTCTGAAGT NTNAGATATG TGGGNAAGT ATTTTGGGNG  
ATCCCCCAT GTCTTTAATA ATCCCCAT

SEQ ID NO:2217: (Length of Sequence = 408 Nucleotides)

GTATCAGAG TTATCGTGA ACACCTGAA TGCCGCTCG GGGGCTTGT CTGTACCAT TGATGGCCCC TCCAAGGTGC  
AGCTGGACTG TCGGGAGTNT CCTGAGGGCC ATGTGTTCAC TTATCTCCC ATGGCCCTG GCACTACCT CATTGCCATC  
AAGTACGGTG GCCCCAGCA CATCGTGGC AGCCCTTCA AGGCCAAGGT CACTGGTCC AGGCTTTTCC GGAGGNCACA  
GCTTTNACGN NACATCCAG GTTCTTTGTG GGAGACTNTN TACCAAGTCC TTCCTTAAAG CCGGGGCTT TCAGGTIACA  
AGNTTCCATT CCCCAGGT TTTCTCTCAA AATNNCCAGC AAAAGGTGGG TTGACTNGNG GGCCCTNGG GNTTTTCCCA  
GGGCTTTC

SEQ ID NO:2218: (Length of Sequence = 316 Nucleotides)

TTTACAGAAT ATAGCTTAT TTATAGAATC TTACAAATAA AACATTACA GTCCACATAA GTTAATTINC TTTTCTAATT  
TCTTCTATA CACCTGAGTT ATTTAAAAA ATACTGTGAT GGAAGTGCAG AACTGTAAAG GGAAATAAGA ACAATAAAAT  
CCTAACCTCT CTGTCAAAA TCAGACAACT TTGTTTAAA GTAGATGCC AGCATATTGC CATCTCTTTG GAAGAGGACT  
TACTTACTC AGCTCTTACG NTACCCAAAC AGAGAAGCCT TCTTTTAAA ACCCAAGGTT AAGGGCCAG TGAAGG

SEQ ID NO:2219: (Length of Sequence = 312 Nucleotides)

GGCTTCTGT CCCCAACTT TCTCAGGTG GCGCTGGAC ACAGCAGCCA CCACAGTCCA GGCTGCAGG GCAGGGTGTG  
ACCTGCCCC GGCAGCCACC CCTCCTGAG AAGAAGCGG CCTCGAGGG GGATCGTTCT TTGGGCTCAG TCTTCCCTC

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CTCCAGTGGC TTCTCCAGCC CGCACAGCGG GGAGCACCAT CAGTATCCCC TCCCAGAAATN TCCTTCCCGA CTTTTCGAAG  
GCTTCAGAAG CGGCTCACC TCTNGCCAGA TAGTCCAGGT GATAAACTTT GTGATCGTGA AATTTTGTTT AAGACACTT

SEQ ID NO:2220: (Length of Sequence = 343 Nucleotides)

CTGGCTAACA TGGTGAATC CGTCTCTAC TAAAAGTACA AAAAATTAGC TGGGCGTGGT GGTGGGCACC TGTAGCCCCA  
GCTACTTGGG AGGCTGAGGC AGGAGAATGG CGTGAGGCAA CAGTGCAGCC TGGGCAACAG TGCACCTCCT CCATCTCTAC  
CAGCGTCCCC TCCAGTCTGC ACGGGGCAGT CCTCTGGGC TTGACCTCTC TGTACCCACA GCTGGGGGCC AGGCAGCCCC  
CCTCTATCCC TCCCAGCACC TACTACATCG NCTNCACAT CCTGATTCC TGTGTATTG GGAAACTNNT NCCAGAGATG  
GAGGTTCTCT CGGAGTATCT CGG

SEQ ID NO:2221: (Length of Sequence = 373 Nucleotides)

CTCTGTCTCC CAGCCCGAG TGCAGTAGCG CAATCTTAGC TCACTGCAGT TTTGACCTCC CAGGCTCAAA TAATCCTCCC  
GCCTCAGCCT CCTAAGTAGC CGAGACCACA GCTGTGCGCC ACGACATCTA GCCAATTATT TGTITTTTGT AGAGATGAGG  
TCTCACTGTG TTGCTCAGGC TGGGTAGGTG TCTAACTCT AGGCTCAAGT GATCCTCCCA CCCAGNCTC CCAAAGTGCT  
GGGACTACAG GCGTGAGTCA CCGGCGCTGG CTTTGTITTA GGCATTCTTT TTCCGCAGCA TCTGTTACCA GCAGCCTGAA  
GNCATTCTTA TAAACAATTA TCANGGAAGA CACATGGGNC AGAGACCCTA AAT

SEQ ID NO:2222: (Length of Sequence = 197 Nucleotides)

GTCTCCGTGA ATTCCCCAA ACGGTTCTT GAGGATGTGA AACCAACTTA TTGGGCTCAA TCCCATTGGT TCACAGGATA  
CTGTACGTAT CTNCCCTTCC AGAGATTGA TATCACCCAG ACACCGCCAG CATACTAAA CGTGTACCA GGTITGCCCC  
AGTACACCAG CATATATACA CCTTGGCCA GCCTTTC

SEQ ID NO:2223: (Length of Sequence = 280 Nucleotides)

TTTTTTTTT GCATTTTITAG TAGAGACGGG GTTTCAGTGT GTTAGCCAGG ATGGTCTCAA TCTCCTGACC TCGTGATCCA  
CCTGCGCTCAG CCTCCCAAAG TGCTGGGATT ACAGGCATGA GCCACTGCGC CCGGCCAACT TTTTGCAATG TTTCTTTAAA  
ATTTCTCTAC TTTTAATTGT ACTTCTAATA CAGACACTTC TGAAATCAGT TTTCACATTG CTGCAGCCTT ACCAATTGT  
AGANACTGTT TATGTGATGT TTGATTCTT CATTTATATA

SEQ ID NO:2224: (Length of Sequence = 388 Nucleotides)

GATTGCAGGC ATGAACCACT GCGCCAGTC GAGTGGTAAT ATTTTGAAAG GAAACCTTTT TCTGAGCAGG TCTCAAAGA  
GAGGTTAAAA TACTGAGTAG ACCATGCTGT AAACAGATGT GCTGTTATTC GGGCTTTGAT ATTCCATTTA TAAAGCACAG  
GCAGAGCTCA GAGTAGATTT AATGTAACTC TGAAGGCAC TAGGATTTTN AGAATGGTAA ATAAGCATTG GCTTCAACTT  
AAATTCAAAT CTGCAATGGC TTGTAATAAG AGACTAGCTT GTTACTGAAG CTTTNAAGCC AGTTGTTTTC TCCTATCTAG  
CTAGGAAAGT CCTAGATGGT ATCTACTTCC AATAAAAGGC TGTTCCTGGC AGGCGCGGTG GCTCACGC

SEQ ID NO:2225: (Length of Sequence = 420 Nucleotides)

GGTGCAGGAG CCTGGGCGG GCGGGCGGG GACTACTCG GAGTCAGGAG GCAGCAGNGG CGGAGGACGA GGATCTCTGG  
CAGTCAGCGC CGCTCGGACG CCGCGGCAC CATGGGCTGC TGCACCGGAC GCTGCTCGCT CATCTGCCTC TCGCGCTGC  
AGTTGGTCTC AGCATTAGAG AGGCAGATCT TTGACTCCT TGGTTTCCAG TGGGCGCTA TTCTTGAAA TTTTCTACAC  
ATAATAGTTG TCATATTGGG TTGTITGGG ACCATTCAAT ACAGACCTCG ATACATAATG GTGGACACCG ATGTAATCAC  
ATTCAATATC TCTGTACATC GGTATGGTG GAGAGAACAT GGGGCGTGGT TGINTCAAGA AGAGTGCTGC CTTCCCTCAA  
GCCCCATGGC ANNGATGGAC

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SEQ ID NO:2226: (Length of Sequence = 264 Nucleotides)

GTACCTGCTC CCTGCCGGCA CCTTINTTGG TGGATATTTA GCTGCCCTCT ACAGTGGTTA TAACATTGAA CAGATCATGT  
ACCTAGGCTC GGGTTTGINC TGTGTGGTG CCTTGGCTGG CCTCTCCACC CAGGGAACAG CACGTCTTGG CAATGCACTG  
GGCATGATTG GGGTGTCTGG AGGACTGGCA GCCACCTCG GAGTCTTAAA ACCGGGCCCA GAATTACTAG CTCAGATGTC  
TGGAGCGATG GCTTTGGGTG GTAC

SEQ ID NO:2227: (Length of Sequence = 402 Nucleotides)

AGAGGATTGG GGCCTGGGG CAGGGGGCT GGCACATTCC TCAGATTCTG GCATGTATC CTGGAAGTAC TCAGCCTGGC  
GGTACTGCCA CAGACGCAGG TTCCCGTCCC ACGAACTGCT GACAATCTTC TCTCAAAGG GGTGCCAACT GACGTCACGC  
ACACAGGCCT TGTGGTTGGT CAGCTTCTTC ACAATGTGGC CACTTAGAAG GTCGTACACA ACCACTTTGC CAGTGGAGCA  
GCCACTGTAG ATGAAGTCT GGCAGTGTCT ATGAATGGGG GAGAACCGGC AGCGGATGAG GGTGTGCAGC ACTCCGTGGC  
CCCGGTAGGT CATCAAGGAG CTGTCCCTG GGAGCTTCAG TTTCGGCCAG GCTTTTTTNG GGCCTTTCT GCCACCGATA  
GT

SEQ ID NO:2228: (Length of Sequence = 394 Nucleotides)

TTTAAAGTGG AAACAATGTT TTTAAGAGT GATATAAAGA AATGCCCCCA CTGTAATCCC TACCATATGT TGATTCTATG  
TGGTGGGAGG GAGGGGAGAA TGATTCCTTT TTCTAGAATC AGAGAATTG GAAAGTATCA AGAAAGATAA TAACAGAAG  
CATGAAATAG AGTTGTGCTT TGAAGATGAA TTGGATGAAA TTNTATATG AAGAGGAGTT TTCAAAGTT GCAGACCCAG  
GATTCCTGGC CAGAAGCATG AAAACGTTTC TTCTTACTG TTCTAGGAC CTAGGCAGCA TTCTTCCAT GTCTGCAACA  
ACATAAGAAA CAACAGCCCA AACAGCAGCA GCAACATTCA TCTGCTTTGG ATCCCATGGA CAGTCATGTT GTCT

SEQ ID NO:2229: (Length of Sequence = 342 Nucleotides)

TTTTTTTTAG GATGATTGAG TGTTCCTTTA AAAATAAAAA CCCACAAAAA AAGCCAGAAC ACCCTACCCA ACCCAGCCCA  
GTGTAACAGG TTAGCCATTA ACACAGAATA AAGAAGGTCC CAGCCACACA CGTCATTACT CGCAGAGGG TGTCCAGCCT  
GGTCGGCGGA CGTCACAGTG GATGGCCCTG CGTGGCTGGG ACACAGACAG GGAGCAGGCA TGGCACCTGC GCCACGCAGA  
GCAGCAAGGC TGAGCATGAC CACTGGAAAT AAATAAACAT GGTGCCGACA GCATCTTTGA ATTAGTAAGA CGTTAGCACA  
AAACAAAAAA GCACAACGAC TG

SEQ ID NO:2230: (Length of Sequence = 357 Nucleotides)

GTGGAATGCA GCCATCACAC AGTAGTTTCT GAGATTGCTT CGTCTAGGT TTTATGGGAA GATATTTCTT TTCTACCAT  
AGGCTTCAAG GCGCTCTAAT ATCCGCTTGG AAATACTACA AAAACAGTGT TTCAAACCTG CTCTATCAAA AGGAAGGATC  
CACACTGTGA GTTGAATTCA CACATCACAA AGAAATCTCT GAGAATTCTT CTGTCTGGGT TTATAGGAAG AAATCCCGTT  
TCCAACGAAG GCCTCAAAGC GGTCCATATA TCCACTTGCA GATTCTACAG AAACAATGTT TCAAACCTGC TCTATCAAGA  
GGAATGTTC ACTCGGTGAG TTGAATGCAC ACATCAC

SEQ ID NO:2231: (Length of Sequence = 304 Nucleotides)

AAGAGACGAG GTCTCACTTT NINGGCCAGG TTGGTCTCAA ACCCTGGTTC ACAACAATC CTCCAGCCTC ANCTCCCAA  
AGTGCTGGCA TTACAAGCAT GAGCCACCAT GCCCAGCTTA AGGGGGATAT TTTTATAGAG CATCTTGCCC TGGTTCCTGA  
ATTCTCTGTA GATAATACAG TTAACAGATA TTCCCTAAG TGATTAGAA CCTTCCATT TGAATGATT TNCAGAAAAG  
TTTACCTATG TAACCTCAGT GGTAGCACA ATGCTGACA CACTTTTCT GCTCAAATGT CTCT

SEQ ID NO:2232: (Length of Sequence = 354 Nucleotides)

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CCTGCCACTG AGGCAGGTGC GGCCCCAGGA CCATCACCAG GAATGCNAGG CCACCCTGGA CCAGAGGTAG GAGCCCAAGG  
 TCCGGCCCTT GCTCTTTGAT TGTGGGCAGC CTCTGCCCT CTCTGGGTCT CAGTTGCCCC ATCTGCAGAG CGAGGAGGCC  
 CGGGCTGGTT GGTCTTGAAG GCCCTTTTCC ATGCCGACAT CATGTCACTC TAGGCCTGGG GTTCAGTTTC CTGTGGCTGG  
 TGATGCTGTG GTTAAGTTTG CTGACCCCA GCAGCCCGAG GGACTGTCTG AGTCACAGCA CAGCCCCTAT TCGTGGCTG  
 CTGGTGTGTG GGGTCAATTC CAGCAGATGA ATGT

SEQ ID NO:2233: (Length of Sequence = 414 Nucleotides)

CCCAAGCCC GCACGATGCA GGCCACTNCG ATTCCACCAA GATGGACTGT GTGTGGAGCA ACTGGAAAAG TCAGGCTATT  
 GACCTGTGTG ATTTGGCGGA CATCAAGCAG ACGGGCATCG TGTITGGGAG TTCTCTGTCT CTGCTCTTCT CCCTGACCCA  
 GTTCAGCGTG GTGAGCGTCG TGGCCTACCT GGCCCTGGCC GCACTCTCAG CCACCATCAG TTTCGTCATC TACAAGTCTG  
 TTTTACAAGC AGTGCAGAAA ACCGACGAAG GCCACCCCTT CAAGGCCTAC TTGGAGCTTG AGATCANCTT TTCTCAGGAG  
 CAGATTGAGA AGTACACGGA CTGCGCTGCA GTTCTACGTG AACAGCACAC TTAAGGAATC NAGGAGGCTC TTCTTGTCC  
 AGGACCTGGT GGAT

SEQ ID NO:2234: (Length of Sequence = 394 Nucleotides)

ATAATCCGAG TGCTCCATCT TCAGTGCCAT CTGGACTUCC ACCAAGTGCA ACACCCCTNCA NTGTGCCTTT TGGACCAGCA  
 CCAACAGGAA TGTATCCCTC CGTGCCCTCC ACCGGACCAC CTCCAGGACC CCCAGCACCC TTCTCTCTTT CCGGACCATC  
 ATGTCCCCCA NCTGGTGGTC CTATCCAGC CCCAACTGTG CCGGGCCCTG GCCCCACAGG GCATATCTTA CACCAAATAT  
 GCCCTTTNCA GAGCTACCCA GACCATATGG TGCACCCACA GATCCAGCTG CAGNTGNTCC TTTAGGTCCA TGGGGATCCA  
 TGTTTTNTGG ACCCTTGGGC GNCAGGAATN GGAGGGCAGT ATCTTACCCN GTAATATGGC NATATNCATN TNCA

SEQ ID NO:2235: (Length of Sequence = 376 Nucleotides)

CTGATATGAT GACAATAAAG GAGTATGCTG CTGCTGTTC GCTTTGCGTC CTGCTACAA ACGCCTGGTG GACAACATAT  
 TCCCTGAAGA TCCAAAAGAT GGCCTTGTGA AAAGTATAT GGAGAAATTG ACATTTTATG CAGTATCTGC TCCAGAGAAA  
 CTGGATCGAA TTGGTTCTTA CCTGGCAGAA AGGTTGAGCA GGGATGTGT CAGACATCGT TCTGGGTATG TTTTGATTGC  
 TATGGAGGCA CTGGACCAAC TTCTCATGGC TTGCCATTCT CAAAGCATTA AGCCATTTGT AGAAAGCTTT CTTCATATGG  
 TGGCAAAGCT GCTGGAATCG GGGGAACCAA AGCTTCAAGT TCTTGGAACA AATTCT

SEQ ID NO:2236: (Length of Sequence = 399 Nucleotides)

TGGCAAGAAC ACTGAAACCC AGCCAACTTC TCCTCAGCTA GGGACCAAAA CCTTTTGTG TGTAGTCTTT CCGAGGTTGG  
 AGACTCTTCT GCAGCCAAGG AAAAGGTGCG GGAGACATGC GGAGACTCCG AGGTGGAGGA GGAGTCCCCA GGAAAGCGCC  
 TGAGCGCAGG TCTACCAAC GGCTTTGGGG GTGCGAGGAG CGAGCAGGAG CCGGGCGGGG GCCTNGGGAG GAAGGCCACA  
 CCCCAGCAGC GCTGTGCCTC CGAGTCCAGC ATCTCTTCA GCAACAGCCC GCTCTGCGAC TCGAGCTTTA ATGCGCCCAA  
 ATNTGGGCGG GGGCAAACCG GCTCTTGTGC GACGGCACAC GCTTGAGGA CCNCAGTNAG CTGATCTTCT GCATCGAGA

SEQ ID NO:2237: (Length of Sequence = 234 Nucleotides)

AAANTACTAA CATTTTTAAT ACAGTCTGAT CAGATCAATT CACATCACAA GGTCAACCGG GGCTTGCTCA CATGTGNCAC  
 AACTGAGGNA CACAATGTCC CTACCTGCCG GCTGTCCAC CTCTCTGGTT CCCAACAGCA TTGAAACCCC CTACTTCCCT  
 GACCAGACTG GCATTTTTTA AAATTTTGCA TAAACTATT TCTTCCATAG NCTTCAAACA ATCAACTAGC CAAG

SEQ ID NO:2238: (Length of Sequence = 369 Nucleotides)

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ATTTAAGGCT GTACTTAACT AATTTGGGCT GAGGATGAAT ATATCAGCCA CAGCACATTA AAGAATGAGC CAAGGATTTG  
 TCATGGTTGG TCACFTTTTA AAGTATTTGA TTAGTGCAAC TGGAGAATGA AAAGTGTATA TTGGTGACGC CAACCTCAGT  
 TTCTGAGCAC TCCTGCTCTG TGGTGAGAAT CAGACAAAAA TTCATCGGGG TGAAAAAAA AAGGCATTAC CTGATTACA  
 CCCGTGCTTT GCTAGCCCTC TTCCATTAT TTCTCACACA GCACFTTGCT CTGTTAAATC CTCTCTCTGT CTCAGACCAT  
 TGCTTGCCCC TTCAAAGGT ATGGTTCAGG CTCCTTTCAA GACATTGG

SEQ ID NO:2239: (Length of Sequence = 399 Nucleotides)

TTAATATAAT ATTCAAGTCT AGCAFTTGCT ATTTACAACA AATAAATATT GCCCCCTCCC AATCAGTAAA CAAACATTTT  
 TTTTCTCTT TTGCTTTTAA TACAAATATT CAATCACCCC ACCCCCACCC CAAATCCTCC TTCTCTACTA ACCCCGCTCT  
 TGCATGGTCT CGTAAAGCCC AGGACGCAGT GGTAATGGC ACTTGCACTG GCATGAGATT CAACATCGAT GGGACTCAGC  
 TGGGACTGTC CTCCTCACC GGGTGACAG TCTGGTCCAT GAAGAGGGNT TCTNTCTCTG CTCCCAGGGG AGGGCTGGGG  
 TAAGCGGTGG GTGAGACTCC CTCCTCTCA GTTGGNCCTG ATGATGGAAT CTTTNGTGCA GCCTGAGAAA GGCTAGAGT

SEQ ID NO:2240: (Length of Sequence = 388 Nucleotides)

TTTTAGAAAT TCATCTCTGA CTTTAATGGC TTAAGCAAGA ACATGGTTTC CGTGGCTCCC CCTGGACTGA ATGCTGGAGG  
 ATATATACTT CACAGTCTGA GGCTGGTCC CAGGAACGTC AATCTAACAG GATGGCAAGT GGTTTTGAAA CATATAGATT  
 TTCAGGATGG AAGTTTGATT CTTCAGATTG TGAATCATCC GTGGAAAAA AATGGTTTAG CACCTAAATC TGTATATTCC  
 CATCAGTGGC TTGGCTGACT CAGTTGTAAA TAGGGTACCC TCCATCTGTC TCCCACCCAT ATGCTCCACT GTCCCCAGGG  
 CCTCAGTGCC TGANCCCTAG GGGGATTGGA GTTGGCTGCT GGATTCATTT CCTGCAAGCA GGCCTGCA

SEQ ID NO:2241: (Length of Sequence = 377 Nucleotides)

CTCCATTTTG TCCTAGTTAC TTTTAAGGTA TAAGCTGAAG TCATTGATTT GAGATGTTTC TNCFTTTCTA ATATAGGTGT  
 TTAATGGTAC ATATTTCTCC CTAAGTACTG CTTTAGTGGC ATCTGCAAA TTCTGACATA CTGTGGTTCA TTTTAATTCA  
 TTACAAAAA CTCTTTAATT TCCCTTTTGA TTTCTCTTT AATTCATGGG TTACTTAGAA TTGTGTTATT TAATTINCAA  
 GTACTTGGCG ATTTATCTCT CTCTGTTATT CATGCTAAT TTAATCCAG TGTGGTCTGA GAATATATTT NGATATCAAT  
 AAAGCTACTC CAGCTACCTT TTGATTAATG TTATCACAGT ATATCTTTTT CTATCCT

SEQ ID NO:2242: (Length of Sequence = 381 Nucleotides)

CCCACTTAA CCAAACACAC ACACACATGA CAACTCTAA GTCTCCAGAC AGACACCCCT AAATAGGCAC TTGGTGTITT  
 CAGCTGGGGG CTGGAGAGAT CTGGGGCTTT GGCTCCAAA GGNAGGAGCT GCTGTCCCA GAGAGGAGAC AACAGCTTCT  
 GGAGGCTCTG GGGACTCATT GGATGGGTAC TGGCTAGGTA GATGGGAAGG GGGCTGTTT AAAGAAGACC CCCCACCCCC  
 ACTGCCCATT TCACCACAAC AGTGAATTGC TGGGAAGTTT GTGCCCTGCG GATTCTGAA TATAGTGGAC AGGCATTTCT  
 AAAGAGCGCA TCACTGAAGG GGCAGAGGCT NGCCTTTAAA TGTGGGCTTT GCATGTTTTG G

SEQ ID NO:2243: (Length of Sequence = 359 Nucleotides)

ACCATTTTAT AAATCAGACT GTTATCTTA ACAGTTATGT AAGTTACATG TATGTTTAAG TCAGAGTATT TCACATGGAA  
 AAGTTTTTAA CTCTATAGG CAAGCAAAAT CATATCACAC AATATATAAG TGGGAAGGGG ATACTGCTAA ACATTCAAAT  
 AAGGCAAGTA TATAAAACCA ATAAAACAAT AATGAAAAA TTCAAGCAAT CCTTTAAGAG AATCAACAC TACAAGCTAA  
 ATGTACTTTC TGAGTGTATT CGTATAATCA AGGCAGTGT TCTCCTTTTA AAACATCAGG AAATGGAATA AGGCTCATTA  
 GTAGATCAG CTGCCCTCAA GATTTCATTT TCAATTTC

SEQ ID NO:2244: (Length of Sequence = 362 Nucleotides)

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ATATGTACTA CATTGGTGG AATACGCATG TACAATCTT CAAAAATAGT AAAGAGCAAA ACAAACAAAA AATAGTAGAA  
GCACTGGAGA AATACACTAT GGCATAAAT AGTTACGGT GGGATGTCAC ATGGACCATA TCTACACTCT GTGGCAACCT  
TCTTACCTGA CTCCAAAGGA TCAGATAATC AAACAGGAAA TTATGGTAGG AAATCAGAAA ATTGAAGTAT GCATTCATAT  
CCTAAGCATT TTATTTTAGC TCAAAATATA AAATATTCAT CAGTTAGCCA AGCTTTGGGA TGAGAGATCA TAGCCTCCTC  
TTTGATAGG GTTCTTGTT TTCTTGATT CATGTTTCAG AG

SEQ ID NO:2245: (Length of Sequence = 333 Nucleotides)

AAGGATCTGA GCGAGTTCAG TGTCATTGTG GGCAACGGG AGATTAAGCT GCCAGTGGAG ATCAGTGGGG CCATCGAGGA  
GGAGTTCCT GTGGCCCGAC TCTACATCAG CAAATCAAA TCAGAAGTCA AGTCTGTGGT CAAGCGGTGC CGGCAGCTGG  
AGAACCTCCA GGTGGAGTNT CACCGCAAGA TGGAGATNAC CGGCGGGAG CTCTCATCCT NCCAGCTCCT CATCTCTCAG  
CATGAGGCCA AGATCCGCTC GCTTACGGAA TACATGCAGA GCGTGGAGCT AAAGAAGCGG CACCTGGAAG AGTCTATGA  
CTCCTTGAGC GAT

SEQ ID NO:2246: (Length of Sequence = 347 Nucleotides)

AAACTAGCTT TGGTGGGAAC TCCCTCACC CTGCTCCCA CAGGAAGSCA TTAATCTATT TATGAGGGAT CTACCTGCTA  
TAACCCAAAC ACCCCACCAG CCCCATCTC CCAACACCAC CACACTGGGG ATTAAATTTC AATGTGGGAT TTGGAGAGGA  
CAAATATCCA AACCATAGCA GTCTTAAAGT ATTAAATTA GAATTTAAAT TAAATTTAA ATTACAGTAT TTAATTAGA  
ATCATTTGTG GAGTTTCTAA AAGGTATGCA TTCTAGGCC CCTCTCAAGT TAGATTTATG GACACTGATC CCCAGTCTGG  
AATTTTAAAA CAGCAAAATC TCATACT

SEQ ID NO:2247: (Length of Sequence = 357 Nucleotides)

CACAGGACAT GTCCTGTCAG CACAAGCACT CCCAAGTCAA TCTGAAAAGC AGGCAGCAGC ATTGCAGGGG ACAGGTCTCT  
CCCTGATCTG GGTGGTGGTC TTCTCCCACT TAAAGCACTA TATACAGGGG GAGGTCCAG GCTGGACATC TTTACCAGGG  
GCTGGGAGAA AGCAGGCCGT GCTCTGTGGT CTCAGAGTCT TCTGGCGCT CTTTGAACC TGACAGAACA TGACCTCAGT  
CCCAGCCAGC GAGTGGCAGA GAGGACTTTG TACTTGGCTG CAATAAAACA TGCCCTTCTT CGCAGAGACA CGAACAATCT  
CGTCTCTACC AGAGGCCCTGT GAGACATCAG CTCAGGA

SEQ ID NO:2248: (Length of Sequence = 327 Nucleotides)

TTCTCTTTAT TAATGGCTAG AAAGTCAGGT TCACCCAGG AGTCACTGA GGGGCCACAG CATTGAAGGG TATGGGGTTT  
GGAGAGATAG GAGCAGGACC CACCACTCAC GTCCAGAACC CAGGGGGCAC ACCTGGTCCA AGAGGTGGAG GCATTGGTCA  
CTGGAGTCAC GAGGGTCAGG ACAGGCACTG AGAGGCTGAG GGAGTNTGG TCCGGAGGGA GGCAGTCAGG GGCTAGGGCT  
GGGAGTCGTA GCCAGTNTGC AGGGCCTGGG AGCCCCAGGG CTGATGCCCT GGGCTGGCGT AGTACTCCAC CACCTGCCGT  
GGCACCT

SEQ ID NO:2249: (Length of Sequence = 404 Nucleotides)

ATTTTAAATT TAGGTTTGTT TTATTTAAGT TTAATGTTAA TTCCATGCTG TGTTTCAGTA AGAACATAC AGATTCTGTA  
TCTGTGGCTC CAGTCAGATA TCCAGTAGTA CAAATTAGCT TCAAGTTACA CATACTGAAC AAAAGAGGTT GAGCGAGCGA  
AGGAGGGGAG GAGTGAGGG AAGGAGGTAG GGGGAGGGG AAGGAGAAGA AACAAAGNN TTGAACAGGC ATGCAGGCTT  
TTCTTACCA CCTTCAAGC TAACCTGCTT CAGTGGGAGA GTAAAGTAGG CAAGANTGAG JAGCCACGGG ATGTGTAAC  
TGTTACCCAG CACCATGCTT TTCAGCAACA TTTTCAGCG AGTTTGGAA CATTTTTTIA CCAGCAAAAA CCATTACACC  
GAGT

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SEQ ID NO:2250: (Length of Sequence = 275 Nucleotides)

TGCCAAATAT ATATATCTGA ACATAGTGAA AAAGTAACAT TAAAAATCAG TCAAATTATT TTTAAAATTC CTTTGCTTAA  
 TAGCCATTAC TTAATCACCT TTTGTTTTTG TTTTTCNCTT CAACTACTAG AGTACTGTAC TTTTGCTTTC ATTCTCTCTA  
 TACATCTGTC CTTCATCCTT AAATGTGTC AACTGATAGT GCTAATATTG GTAGATAATC TACGCTAGCT GCTGTTCTTT  
 GTACAGAAGT TGGTTGATAT CGCTGATTCA CTTTT

SEQ ID NO:2251: (Length of Sequence = 426 Nucleotides)

GGATAAGGA GATGAGAGCA TGCTCTGCCA ACTGGCTGGG ACCTGAATGT GCTAGGCAAG TNCCTACTACA TCAGCTCAAG  
 AACATAACA AAAATGTAAT TTAATAACA GATGGTTTAA AAAAATATCT GATAAAATTT ACCTATCCCT CTCCTTGCT  
 GTGAAATAAT TTAATAAATT TATTCTAGAT GTAAAAATAA TAATACAAA AAGTTTGTTT AAAGACACCT GTGCTCTGTT  
 TGTTAAGTGT GCAGTCTGGG TCCCTTGGGG TGGAGGGAGC TGGCCAAGGA ATGGCATTGT GCAGAGGCAT ACCGGGAAGC  
 TCTCTGGATG CAACCCACCC TCTACCGCTT GGCAGTCAAT GACCTTGGGC ATGATGTTTC TTCACCTTCTC TGAGGGCTAG  
 GGCCTTGATT CTGAACATGG GGGGCT

SEQ ID NO:2252: (Length of Sequence = 315 Nucleotides)

GAAAAGATAA ACAAATTAAT TAGACCATTG GTGAGATTAA CCAAGACAAC AGGAAAGAAG ATCTTAATAA GCTCAATTAG  
 CAATGAAATG NGAGCTACTA CAACTGATAC CACAGAAATA CAAAGATCA TTCAAGGCTA CTATGAACAC CTTACGTTGC  
 ACAAAGTAGA AAACATAGAG GAGATGGATA AATTCTTGGG ATTTTAAGAN TAATACAATG GACTTTGGGG AATCAGGAGA  
 AAGGGTAAGA GTGGGGTGAG GGATAAAGA CTACACATTG CATACAGTGT ACACCTTCTG GGTGATGGGT GCGCC

SEQ ID NO:2253: (Length of Sequence = 335 Nucleotides)

AGATTATTTC TCATGTACAA AGCGGTGAGC CCACGGGACC ATATACGACA GTTGACACAGA GTCCTAGAAA AACGCATCTN  
 TCTAAAGGCA ACTCAGAAAG GTAAGGCAGG TGGACCCCTT CCCCCACCC ACAAAGCACA CAGAATGAAA CGGAGAAAAA  
 GAGAGAAGCC AGTGGCGGG CTGACCCAAG AGTCCCGGCC CTATGGGGTC TCCCAAGCCC CAGGGCACAG GTGGATATGG  
 CCTTGAAGAG AGAGCCCTGC CAGGGCTNAG GCCAGGCTTC TCACTGGCTG CAGGAATNGG TAAGGGGCTC AGGCCAAGGG  
 GAACACTTCA GGGGG

SEQ ID NO:2254: (Length of Sequence = 380 Nucleotides)

GGAAGGCTCT GGAGAGGTTT CTGAGGATT ACITTTGATGG CAATCTGAAG AGATACCTGA AGTCTGAACC TATCCAGAG  
 AGCAATGATG GGCTGTGAA GGTAGTGGTA GCAGAGAATT TTGATAATA ATATACAATA ATCATATCCA CTTTCCACCA  
 CCTACACAAA AAACATTTCA TACAGACTGC AGTACAGTGA TTTTTTTTTA TGAAGTAAAA GTTCAAAATTT GTTTCAATTT  
 CTCTTCTGCA GATTCTAAGT AAAAAATGAC AAAATATGCA TAGAGATGTT TGTAACCAA AAATAAATGT CTAGGGCCCC  
 GAACCATCTT GAATGGGACC CCTCTCTCA GCCAAGGGCA TTCCAAATTT AACCTGCAAA

SEQ ID NO:2255: (Length of Sequence = 399 Nucleotides)

ATATAAAAAG TGTTTCTGTG ATTCTNCAGA GCCCAGGAGT CAGTGTGGT GGTGGAGGG ACCTGCCCCC ACTGGTTCAT  
 TTAACCTCTT GTCTGGTGC CCTCAGAACC TCAGCCAGAA AGGCAAGGAG GAAATCAGAG CAGGAGCCTC ATACTCTTGG  
 TGATCTATTC ATTCTGTGAC CTCAGGGGTC ACATATAAGG TCAGTGTTC TGTCCCCGC CGGATCTGCA CTGCCAACTG  
 GATTGGGTT CGAACAGCTT CATAACATC TTCAGCAATT TGTACCATCT GCTCCCAAT GGCCAAAATC ACATCACCAG  
 GTCGAGACC CAGCCCGGTG TGCAGGGGAG CCCAGGATG GTTTTGGGA TGAGTACAT ATCTGAACA TCGGGNAG

SEQ ID NO:2256: (Length of Sequence = 371 Nucleotides)



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TTTTTTTTT TAACTGTAAA TGCTATTTTA TTTTAAACAT TTTTGTITAC AAAAAAAAAA AAAATCAATG ATTGGTACCT  
 TTTTACACT CTCAGATTCC TGAATATGGA CAGATCTTCA AAGGGAGGAA GGAGTTCTCA TATGAAATTT AAGATAGACT  
 GTCCTGAAGG TTGTGGGGTG GGGTTTTTTG TTGTGTTTAA ATTCGCTTTT GTTTTTTAAGN CACAATAAAG CTAAAATGTC  
 AAGTCTCTGG GAGAGATCCC CTTAAAGTTT CAGTCAAGGA GCATATCAGA GCACAGACAA GNGACCCCA GCGTGGTGCC  
 CGCCGGCCCC TCCCGGCTGC CCAGNGTAT TTGGTAGCGC ATGGGTTGAG A

SEQ ID NO:2257: (Length of Sequence = 372 Nucleotides)

AACCTCTATGG CACTAATGTA TGATGGATTG ATTTCCAGAC TGTCGGCCAC GGAAGCACTT CTTCATGGCC TCTGCCCTGG  
 ACAGCAGCCT GTCCTCCGGG CTCCCCATGT TTTTACCAGC TTCTGCTGAG TTCTTACAAT CTGAGCTCT GCTGAGAATT  
 CTTTTCCTTG AAATTCTTCT ACCTAAAGCC CCAGCCCCCA AAAGAGCATG TCTCAGGAAC TCATTATGCC CTGAGTCAAC  
 AAGAAGTGTG TGATAAATGG CTTAAAAGTT TTTACAAGAA GTAACITCCC TTGGTAAGGA GTAAATAATA GCTCTGGGAA  
 TTTTCCAGAT AAAACTATTT CATTTCTCTG GTCAGTGGCC CCATGGGGAG AG

SEQ ID NO:2258: (Length of Sequence = 340 Nucleotides)

CTCAGCCTCC TGAGAACCTG GGATTGCAGC CTCCCAGAGAA CCTGGGATTG CAGGCACCTG CTGCCATGCC CAGCGAAGAT  
 TTGTATTTT TAGTGGAGAC GGGGTTTCAC CATGTTGGCC AGGCGGTCT CAAACTCTG ACCTCGTGAT CCACCCGCT  
 TGGCCCCCA AAGTGCTGGG ATTACAGGGG TGAGACACCA CGCTCGGCT TTATATATAT TTNAGAGAG GGGTCTCAT  
 TTINTGCCC AGGCTGCTCT TGAACCTCTG GGCTCAAGCA ATCTTCCGC CTCAGNCTCT CAAAGTGCTG GGGATTACAG  
 GCAATGAGCC NACCGTGNCC

SEQ ID NO:2259: (Length of Sequence = 394 Nucleotides)

CCCCCAGAT CCCACTGTGA GGAGAACGCC TCTGCTAACA TTTTCTCTAT CTGTATATCC TCTGGGAATG AGACCCACTA  
 AAGGGCTAGA GTGTGCTCA GTGTGAATTC CTCTTTCTG ACTCCATCTT CGCGGTAGCT GGGACCGCGG TTCAGTCGCC  
 AATATGCAGC TCTTTGTCCG CGCCAGGAG CTACACACCT TCGAGGTGAC CGGCCAGGAA ACGGTGCGCC AGATCAAGGC  
 TCATGTAGCC TCACTGGAGG GCATTGCCCC GGAAGATCAA GTCGTGCTCC TGGCAGGCGC GNCCTGGGA GGATGAGGCC  
 ACTCTNGGCC AGTNCGGGT GGAGGCCCTT ACTACCCTGG AAGTAGCAAG GCGCATGCT TINGAGGTAA AGTC

SEQ ID NO:2260: (Length of Sequence = 359 Nucleotides)

TTTTTTTTT AGATCTGAGA TTCCTTTAAT CAGAAGCAGG TCGTCCCAC AGTGTGCTCT TCAAGCCCCA AAGGGCACGC  
 CTCTAGGACT GNTCCTTAG AGCGAGGCTC GGGCTCTTGG TAAAAAGCA TTGCTTGAT TTTATTTAAA CAATGGTGAA  
 TCTTCAAGGT GCCAGTCTAC ATGCCAACA GTCCTCCAGG NTTCAGGNC ACAGTCACCG TCACTCAGAG ACTGCCTCAT  
 TINGCAAGAG AGAAAAACAG TGACCACCAC AGAGGGCAGG GAGTGACAAA GCTTGTAGGC TAATGCTGCA AAAGCCGCTA  
 GAAACTGGGG GCCACACACA AGNGCCANC AGGTGCGCC

SEQ ID NO:2261: (Length of Sequence = 360 Nucleotides)

TTTTTTTTT GAGACAGAGT CTGCTCTGT CGCCAGGTG GAATGCAGTG GTGTGATCTC AGCTCACTGC AACCTCCGCC  
 TCCGGGTCC AAGCAATTC TCTGCTCAG CCTCTGAGT TGCTGGGACC ACAGGCGCAC GCACCAGGCC AGGCTAATTT  
 TTGTATTTT AGTAGAGAGG GGGTGTACC ATATTGGCCA GGCTGGTCTC TCGAAATCT TAAATCCAAA CATTTCTATT  
 CTCTAGATC CCTTGCTCAG GCGAATCCTT TCATCTTTC CTATACCTC ATCAGCATGT AAGTGTCTG ACATCTCTCT  
 TCTCCTTCCC TATTAGCTCT CTACTCTCTN CANTTACAG

SEQ ID NO:2262: (Length of Sequence = 348 Nucleotides)

469

CTGTCAAAAA TGTATTATAT CAATAATTTT ATCAGCAGCA TTAAAGAAAT AAGAAATCAT TAGACAATAG AAGACAAACA  
 TGGTAATGCA GTCAGGCCAG CACACAATAC ACCGTTTTCA TCACACACTG TAACCTGAAT CCCTGGCAAT TTCCTAGAGG  
 TATTAAATC ATACCTTATT AAGAATTATT GGCCCNAGG AGTNGGGGGG TGGGGGGGTT GCAATCTGTC CAATCAACAT  
 CTGGCTCTTA CTTTCTCCCN GTAGTATTAC ATTTGTATAA TATTCTTATA GGAAACAACT CAACTCCATG TTTATAAAG  
 CACCATACGG TTTTCCATC CTGTACCA

SEQ ID NO:2263: (Length of Sequence = 352 Nucleotides)

CCCCAAAAGT TGACATGGTC AATGAAGAAA TAGGCAAACA GCAAAAAGTT GCAGTCATAC ACCAAATGAA AGAAGATCAA  
 AGCAAAATCC CTGAAGGAAT CCAAGTTGAC TCTGACGGGC TAATCACCAT AACAACTCCC ANTAACTTG CCAAGCTCAG  
 TGTTGAGCC ATGCCCCCTC CAGAAGAAGT CACCCAGNTT CTGGAAGAAA ATAGTGANTT GATTGTTCT ATGGAGCAGT  
 TGACATCCTC TTTGAATNAG GGTGAAAATA CTCACATGAT TCATCAGAAG ACCCNNGGA AAATTTNGGA ATTCAAAGGA  
 AAACTTTNG CAACANCTAA CAGGNGNTG AT

SEQ ID NO:2264: (Length of Sequence = 381 Nucleotides)

GCTTACAGTC TAGAACAAGC TTTTCCAGCC CACAGCCCAG GATGGCTTTG AATGTGGCCC AACACAAATT CATAAACTTT  
 CCTAAACAT TATGAGATCT TTTGTGATT TGTGTTTAG TTCATCAGCT ATCATTAGTG TTAGTGATT TTTGTGTGG  
 CCAAGATAA TTTTCCAAT GTGGCCAGG GAAGCAAAA GATTGGACAC CCTGGTCTA GAAGGAAAGG CAAATATTAA  
 ATAACCTCAG AAGTGATAT TACAAATTGT GGTGAGTTAT AAACACACTA TCAGGTGTTA TAAAGGAAGT GAAGGAAGTG  
 GTGAGGAAAT TCTTATCAGG GNAGTGATAT TTNANTGAAG GGCCTTAGGG GATGAGTAGG G

SEQ ID NO:2265: (Length of Sequence = 301 Nucleotides)

CATCTTCTCT CCATCTGCC TTTCCACAGC AGTCAGTCTG GTCCAAGCCA CCATCATCTG TCACCCAGAC TACCATAGCC  
 ATCTCTAAC TGGTCTCCC ACTTGCCGTC TTTATTCTGC ACACAGCAGC CTGAGTTTAT ACACACAGT GCATTCTATC  
 ATATTTTGT TAAAACTGTT CAATGGCTTC CCATGGAAGT TGGGAGTCTG GATATCTTCA CAAGTGTGTA GCATGGCCCA  
 GGACCAATCT GGACACCCCT NCTGTGTTGT NCATNCATGC CTGCACCAC TTTTGGCCT T

SEQ ID NO:2266: (Length of Sequence = 360 Nucleotides)

CGCTGCATG CCCACAACA ACACAACTTT ATTCTCTCC CAAACATCTG TCAGGCTGG CCTTCTGAG CAGGAGCTGA  
 GCAGGAACAG GGCTGGCTG CCTCTCTCT GCCACAGCTC TGACCTGGG AAGGCTGGAA GCTGGCATCG TAATGGATGG  
 GGGAGTGGGT GGAGGATCTG AGGGTCCCT GGGTAGGTTT CGATACCTTG GACAGGTGGG CCTCATCTG ACTTAGAACT  
 CGGGGAGGG CCACTCTTCC TTCCCTTCT TCCAGCAGCA GCTCCACCAC CCTCCACCTT CTGTCTCGA CATGTGNTCC  
 AGAAAACCCA GCCATGAGGG ACGCTNIGA GGAAGGTCT

SEQ ID NO:2267: (Length of Sequence = 391 Nucleotides)

GATGGAGTCT CGCTCTGTCA CCCAGGCTGG AGTGCACTGG CAAAATCTCG GCTCCGGACC CCCCCAAGAC ACATATGACC  
 CACCACCCCA TCTCTGACCA TGAGGCCACC CTGAGGTGCT GGGCCCTGG CTTCTACCT GCGGAGATCA CACTGACCTG  
 GCAGGGGAT GGGGAGGACC AGACCCAGGA CACGGAGCTC GTGGAGACCA GGCTGCAGG GGATGGAACC TTCCAGAAGT  
 GGGGGCTGT GGTGTGCTT TCTGGAGAGG AGCAGAGATA CACCTGCCAT GTGCAGCATG AGGGTCTNCC CAAGNCCCTC  
 ACCCTGAGAA TGGGAGCTTG TCTTCCAGC CCACCATTC CCATCGTGG CATTATTGCT GGNCTGGTT T

SEQ ID NO:2268: (Length of Sequence = 191 Nucleotides)

471

TATTACACAA CTGTTGTTAA ATTCTAGTAA GATAAATTGA TACTAAAGAA AACAAACCCA GAAAGATCAA GTGACTTGGN  
 TCACACAACA CAGGNATTAA GANGGAAATT AGTATTCCTT GTTGGAATAT TTTCATTTG AATAGTTACA GGAAATTTA  
 TTTCATATT TTACAAATTA AATGTGTATT GGACATCATA GTGGGGAAAT

SEQ ID NO:2276: (Length of Sequence = 349 Nucleotides)

TCTCCAGGTC CTGGAGGCAA CCGCAGAAAC AGAACANTGC AAATGCCAGC ATTTCCGCAG ATAAGCGTGG CCGGCCAGCT  
 GCAAACACCC CTGACATGCA GCGTCTGTT TAAATCTGG TTGCCCGCTG CAGCCAGTGG AGCTCAGAGG GCTGCCTGGC  
 GGGTAAGGAC TCCAGGCACA CAGCAACAAG TGGCTGCCAC CTCAAATCCC ACGTGAATA TGATGGGGTC CGAGCCAGCC  
 AGTAACTCCA NGAGGGCTGT AGTGTGTAAG TTCGGCCAGA GTTINCAGAT ATAATANCAAT TGGCCCCACG ACGTAGACCT  
 GTGGCGGCTC AGGGTTAAGA GACGGGAGC

SEQ ID NO:2277: (Length of Sequence = 182 Nucleotides)

CTTTATATAG ACTCTGGTTC TAGAACTCG CCTGCAGCCG CTGGCTGGAC CAGCACACGC TGACGGGGCC GGACTATTTA  
 CAGGCCCCATT GCGGGCTGTA CCTTGGCCAC CTNCCGGCAC GGTGCTCAGC TGTGACGCA AAATAAGTTA GGGCCGGCCG  
 GCGGGGGCGG GCGGGGAAG G

SEQ ID NO:2278: (Length of Sequence = 276 Nucleotides)

GTATTATTTT CCCAAATGA AGCAAAGCAA GTACTGGGC GGAGTCATCA GAAATACCTT GGGAGGTGGT GGGGAGGGGA  
 GTCGGGAGCA TCAGGGAAAA CCCATCTCAA CTCACGCCTC TCAGGGGTG CAGCTGGAAA NTCITGCGTT TTCCATCACT  
 GGTGCAGAAA GAACCTCCCC AGGAATGGCC AGTGGCCTTT CGCCCGTAAC AAGGNCGCAC GCTCAGAGCA GTCTCTCTCC  
 TGGGCTGGGT GGACGCGGAG GCGCGAAGGA AAGCCT

SEQ ID NO:2279: (Length of Sequence = 193 Nucleotides)

TGCACCCATG GCCCCTCCA GAGCCCCAGG GCCCCTGAGC AAGCAGGGCT CTGGCAGCAG CCAGCCCATG GAGGTGCAGG  
 AAGGCTATGG CTTTGGG GGAGATGATC CCTACTCAAG TGCAGAGCCC CATGTGTGAG GTGTGAAACG GTCCCGCTCA  
 GGTGAGGGCG AGGTGA CCTTATGCGC AAG

SEQ ID NO:2280: (Length of Sequence = 401 Nucleotides)

GTGATTTTCC TGCTCCGTC TCCTGAGTAG CTGGGATTAC AGGTGCCAAC CACCACGCCC AGCTAATTTT TGTAGTTTTA  
 GTGGAGACGG TTTCGCCATG TTGGCCAGGC TGGTCTCGAA CTCTGACCT CAGGTGATCC ATTCCCCTCG GTCTCCCAA  
 GTGCTGGAAT TACAGGCATG ACCCATTTGG CCCGGCCCCA CTGTTTCCTT TCTAATCGAG TGAGAAAATG GTCAGTATTT  
 CTGTCAACAA AATTCAAGAG GCTCTTTGTA CGCACAGGAC TTCAGGCCCT TCTCTCAACA ATCGCCAAAG CTGGAGGCAT  
 CCACAATGGA GGAACAACCT GGGGGTTTTG AAAAAACAGG GAATGTTTCC AGAATINTTC TTCAAGAGTA TTTACATTTT  
 T

SEQ ID NO:2281: (Length of Sequence = 217 Nucleotides)

AGCAOGGGA TTGTCCAAGG GTCTCCGCGC GCCCAGGGCA GTGGTGGTGG CAGCACGAGT GCCCACTATG CAGTCAACAG  
 CCAGTTCACN ATGGGGGGCC CGCCATCTC CATGGCGTGG CCGATGTCCA TCCCGACCAA CACCATGCAC TACGGGAGCT  
 AGGGGCCCGN CCGCGNAAC TNACAGCAC AGGAAACCAA ATGNATGTCC CTGCCCC

SEQ ID NO:2282: (Length of Sequence = 302 Nucleotides)

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CCGATGGTGA AGTGGTAAGA GGTGATGGC CTGGGAGTTC ACTTTATTAT GAAGTAGAAA TTCTGAGNCA CGACAGCACC  
 TCCCAGNITT AACTGTAAAA GTATAAAGAT GGAACAGAGC TTGANTTGAA AGAGAATGAT ATTAAGNCTT TAACCTCCTT  
 TAGGCAAAGG AAAGGTGGCT CAACTTCCAG TCCCCCTCC AGACGCGAG GGAGTCGATC AAGGTCACGC TCCCGATCCC  
 CCGGTCGACC ACCTAAAAGT GCCCGCGAT CTGCTTCTGC TTCCACCA GGGCGACATT AA

SEQ ID NO:2283: (Length of Sequence = 314 Nucleotides)

GAAAAAGTGG AAGTCATCAC CGGGGAGGAG GCGGAGAGCA ATGTGTTACA GATGCAGTGC AAGCTGTTTG TTTTGGACAA  
 GACCTCACAG TCTGGGTGG AGAGAGGCCG GGGGCTGCTC AGACTCAATG ACATGGCGTC CACCGATGAC GGCACACTAC  
 AGTCCCGACT AGTGATGCGG ACCCAGGGGA GCCTGCGACT GATCCTCAAC ACCAAGCTGT GGGCCCAGAT GCAGATCGAC  
 AAGGCCAGCG AGAAGGAGCA TTCGCATCAC AGCCATGGAC AACGAGGACC AGGGCGTGAA GGTCTTCTGT ATCT

SEQ ID NO:2284: (Length of Sequence = 262 Nucleotides)

GGCGTGACAC ACGCGCCCG CCTGTGGAG CATTTTAAAA TCTGATTCCT TCCCCCTGA AGTTTCGGTT CAACCCCTNN  
 CTGTGGTCAG GTTGATNCT TTAATTGCTA AAACAAGTCA AAATTCATA TCCATGGCAG CTGACAATTC AGACTTTGGC  
 ATATAAGTA AAGGGTTTAT TTTCCATTC CTCTGTAAAT GGTGTGINT TCACCTATTT ATAGTGCTAT GAAGCTGGTC  
 ACCTGGGAGA ATGGCATAAC TG

SEQ ID NO:2285: (Length of Sequence = 193 Nucleotides)

GTGAGACACA GTCTTGCTCT GCTGCCCAGG CTGGAGGGCA GTGTCTCGAT CTTGACTCAC TGCAGCTGAT GCCCCCTGGG  
 TTCAAGCGNT TTTCCACCT CAGCCTCAA GCAGCTGGGA TTACAAACAT GNACCACCAC GGCTGGGTAA TTTTGTGTGTC  
 TTTAGTAGAG ACGGGGNTT GCCANGTGG CCA

SEQ ID NO:2287: (Length of Sequence = 342 Nucleotides)

AGGCTGGAGT GCAGTGGCGC AATCTTGCT CTGTGCAAGA TCTGCCCTCC AGGTTACAC CATTCTCCCG CCTCAGCCTC  
 CCAAGTGGCT GGGACCACAG GCACCCACCA CGCCTGGCTA ATTTTMTTG TATTTTATAGT AGAGACGGGG TTTACCATTG  
 TTAGCCAGGA TGGTCTCAAT CTCTGACCT TGTGATCCGC CCGCCTCGGC CTCCCAAAGT GCTGGGATTA CAGGCGTGAN  
 CACTTGCGCC CGGCCTTCAC CTGTTAGTTT TTCAAGAGGT GTTCGTATG TCCACTGTGA TAGTTATTTT GTGTGTCAA  
 CTGACTGGGC CACGGGTGC CC

SEQ ID NO:2288: (Length of Sequence = 343 Nucleotides)

TTTTTATGT AATGAAATTT TAAAAGGCAG TTACATTAGT TACACATATA CACAACCGAC TTAATAACTG TTAGTCATAG  
 AGAACATTCA AGAAATACAA ATGATTTATC CACAGCACAG TTCACATCCA TAAGAAGAAA GAGAAATGGT TAAGTACTTA  
 AACTGTCCAC TGACACCTGC TTATGAAATC TTTTCTTTC TTTCTTTTTT TAAAGGAAAC TGAGATTGTT AGATGAAGCA  
 AGCCGTCTG CTCCCGCACA GCCTGTGAAA CCTCCATTTT GCCACTTCA AGGTCAGTGC CCCACAGACC CTGGGCTGTT  
 GTTGACCATA AACTAGCTT TGG

SEQ ID NO:2289: (Length of Sequence = 160 Nucleotides)

CGGGCCGCAA AGCTCAGTCT CTGGCGGTCC AGGCCCTGGT GGCTCTTGAT GATCAGGTCC ACGGCGGCTG CCACACGNTC  
 CTCTAGGCC TTCAGCGCA NAGCGNCTCC AGCACCTGT TGTCTCCAT GTCTGTAAC TGCTGCAGA AGAAGCATAT

SEQ ID NO:2290: (Length of Sequence = 310 Nucleotides)

473

CCGACTCTAC TGAAAATACA AAATTAGCGG GCGTGGTGA CGCATGCCGTA TAATCCAGC TACTCGGGAG GCTGAGGCAG  
 GAGAAITGCT TGAACCGGG AGGTGGAGGT TTGCAGTGAT CACACCACTG CACTCTAGCC TGGGTGACAA GAGCAAACT  
 CTGTCTCAA AAAAAAAAAA AAAAGNTTAA ATGAGGTCAT GAGGGTGAGA CCTGATCCA AGCTCATAAG TGTCCTTAGA  
 NGTGTCTTA GAAGTGTCT TAGGACACTT CTTTCTAAGT NTCCTAAGIT GGGGAGCTTG CTCTCCCAA

SEQ ID NO:2291: (Length of Sequence = 270 Nucleotides)

CAAGACAGGG TCTCATCTTA TCTATTGCC AGGCTGGAGT GCAGTGGTGC AATCTTGGCT CACTGCAGAC TCAACCTCCC  
 AGGNTCAAGT GATGGAATTC CCNCAGTTTG TCTTTGACAT TAAGANGACA CCACATATAG ACGGCTGTTT GTCAGTGATT  
 GCCAGGAT TCATGGATGC ATTINCTCTC ACAGAGCAGC AACTAGGGAA GGAAGCACCA ACTAATAAGC TTCTCTATGC  
 CAAGGNTATC CCAACCTACA AAGAAGAAGT

SEQ ID NO:2292: (Length of Sequence = 332 Nucleotides)

CAGTTGTCT ATATTCTCCA CCTTCCCTTG GTTTCATTC TCTTCGCTC CTGAATGAGA AGTGCCTGAG ATACCTTCAT  
 TTCTCTGAA AGTATTGATC CAAGTTTGA CAAATATCTC CCTCTTGTT GAGAGAATTC CTTATATGTG AAAATACCAA  
 GACATCTTG ATATTTAGCA GGCATCAAA TATTGTCTC CTCTTTTGA GCATAATTAA GCCAGACTGA TGTTTGCAAT  
 TGAGTATCAT CAGCATGAGT AACCTTTTA ATCTCTCTC CCTTAACATC TTGTTCTACA CTAGAGTCTA GGGTCAGGGT  
 ACGTACAGTG AT

SEQ ID NO:2293: (Length of Sequence = 255 Nucleotides)

GCACCTGACT TATGTGAGIN TCAGGCTTCA ATGCCTGINT TAGAGCTACT CCTTCACACA AAATAGTTCA GAACATAGAG  
 AAGGACCAAG GTTAATAAAT GATTTTATC CCAACACTA AACATGATTG ATGGGTAGAG GCTGCCCGAA GTACTGTGTA  
 AAGATGGAAT CTGAGATAGA AGAATGCTGT GGTCAATTAG TAATCTTGC CCATGGAGGG ATTAGTGACA CATGCCCTGT  
 ATATTGTCA TCTGT

SEQ ID NO:2294: (Length of Sequence = 236 Nucleotides)

GGCTTCAGAA GCTAATGGAA GATTCATATC AACTTACTAA TAATCAAGCA CTTTCATATT AAGACAATGT ATGATGTTTA  
 GTAAATGTA TTTTNCATA AAAGAAGTTT AAAATAAATT AGCTATTTCA AGAGNATCAT GGTGTGCAGC AAATAGAAAT  
 GTTGTGCTTA ACTCAAATCA CAGTAATATT CTGTGGTAGT CAATTGATTT CTTTGAGCCN TTAATCTTTC ATCTGT

SEQ ID NO:2295: (Length of Sequence = 308 Nucleotides)

TTTTAATTTA ATCAGTAACT TTATTATAAC AAAACCTGTA TATTACCCAT TAAACTCAT GTGTAACTT CAGTGATGTG  
 AGCTGTATTA AACCCAGGTA TTAGTGAAAA TTTGCATTGT AAAACCTGGT AACAGTAGAC ATCTATGGGT GGTCAATTAAT  
 TCAAGGACAC CTTTATTTT AAACAATTTT ATATAATTCA TATCAATATG CAAAATTACC ATAAAGATA CANGGATTAA  
 TACATATTTA CATTTTGA AATAGTTACT CTGAGGTGA CAGCTGTCAC TTTTCTAAAT ATTTACAG

SEQ ID NO:2296: (Length of Sequence = 279 Nucleotides)

ACCCCTCTG GAGGCTTTC CCTTCCCGAG GGCTTCCCTC AGGGCTACGG TGCCCGCCA CAGTTCAGTT TTGGCTACGG  
 GCCTCCACT CCACCGCCAG ATCAGTTTGC CCTTCCGGG GTTCTCTCT CCACCGCCA CTCCCGGGC AGCACCTCTG  
 GCTTCCAC CGCTCCGTC TCAGGCTGCC CCGACATGA GCAAGCCCC GANAGTCAG CCAGANTTC CCTATGGTCA  
 GTTTCAGGT TACGGCCAG ACTTGAGTGG CTTCAGCA

SEQ ID NO:2297: (Length of Sequence = 306 Nucleotides)

474

CTGAGAAGAA AGAGTGTGTT GTAAAGGACA ATGACTTTGA GCCCAGAGCC CTGAAAGCTA ATGGAGAAGT TATCATTGAA  
 ATTCCAACAA GAGCTTGTGA AGGACAAGAA AATGCTATCA AGTCCCTGNN GCATGTACAA TTNAAGCAA CAATTGAATA  
 TTCCCGAAGA GGAGACCTTC ATGTCACACT TACTTCTGCT GCTTGGAACTA GCACTGTGCT CTGGGCTGAA AGAGAACGGG  
 ATACATCTCC TAATGGCTTT AAGAATTGGG ACTTCATNGT CTGTTACAC ATGGGGGAGA GAACCC

SEQ ID NO:2298: (Length of Sequence = 307 Nucleotides)

AGTACACCTA GTATCTTTAC AGTGACTATT AAGTATTTT GAACTCAAAG TATATATTCA TCTTAACTC CTGGAACCTAT  
 GAACCCCTCC ATGTAATTIN CTGATGAATG AAAAGGAAAA CTTTCTTTCA AATAAGTGTG ATCTGTTGCA AAAGTATGTG  
 ATTTAAAAAC ACATGTAAAT ATAATCTTAG CTCTAATGTT TTCTTTGGG AGTTTGGGAA AAAGCAGTTA CATTTCTCTG  
 TTGCTCTGTT TTTATCATTT GAAAATTGGA AGGATTCATT CTGGATTGCT GAGCTGCATC AGTAGGG

SEQ ID NO:2299: (Length of Sequence = 289

GTITTTAATG CATTTTTTTT AAAGATTAAA GTAAATGTC TCAATTGTAA AAAATACACA CCGGGCAAAT CCTACCTGG  
 NTAATAAATA TCTACATCAC AGTACAATAA AATTNCTNCT CTATAAAATT TAAATATGGA TTATAGTCTA TCACTATCAA  
 AAGAAACACT ATGCTAATAT TTCCATATTA TTAATAAAC AGGAAAAATT ACGNGCTTAT TTTAGAACCT GATGCCATAG  
 CCGTTGGAAA GGGCAAAGAG ATTCAAATGT CGATCATCAC TCTCCATT

SEQ ID NO:2300: (Length of Sequence = 371 Nucleotides)

CACCCATTGA AAAAGCAGCC GCCCTCCTTC CCAGGAGCTG CTGAAGAGAG AGCCTGCCAG AGCCTTGCCA GCAGGGACAG  
 CCTCTTAGAT ACCAGCAGCG TCTCAGAACC CAACGTGTCC TTGTCTCNC ACTGTGCGGA CAGCAACAGT GGTGACATAG  
 CTGTNATCGN GGAGGTCCGG ATGGAAAACC CAAAGGAGAG TAGCAGTTCC CTGAAGACTG GGAGGCACAG CTNAGGCCAA  
 GACAAACCAC ACGNAACTTA CCGACTGCTG AAACGCAGGA NTCGATCAT AGAAGCTGTC ACCAATCTTC GCTTAATCGA  
 GAGTTTATTC ACGTTTCAGA AGATGATCAT GGATCAGGAG AAGCAGGAAG G

SEQ ID NO:2301: (Length of Sequence = 287 Nucleotides)

ACTTGGTGTG GGGATTGTG GTGAGGTTTG CTGACACCTT GACCATTTT CACTGGCTGG AATGAAAGG AACTTCCAC  
 TTGCTCTTTG AAGGCAATTC CATCTCTCC AGGTCTCTTA TTCTCTCC ATATTCTCTC AACTTCCAA ACTTCTGAAG  
 AAGGGAGCAA ACTTTGGCCA CGAGGAAGGA GTNGAGCTGC CTCTGTACTT GTCAGTGCAC CTGCACTGGT TGAATCCACC  
 TTTCTGGGT CACGCGCTG TGCTGGGTGG TCACAGCCTA GGACCC

SEQ ID NO:2302: (Length of Sequence = 358 Nucleotides)

GGAACACAGG ATCCAAACTT GTCGGGGAAC TCGGAGAGAA GATCATCGTT GGCGCGGTCC TTGGTGGGCC CAAGGATGAT  
 GATGGGGCGA GCATAGTGCA CTTCCATCTG CGTCACTGTC TCGTAGCTCA GAACCGAGTC TTCTCGACCC TCGATCCAG  
 AGCTGGAGCC CCAGTCTTG GCCTTTAACC TTGACCACTC TGTGCTCA ACCCGCGTT TGCTGGGGAT GAACCAATG  
 TCGTGGTCT CACTGTCAGA GTGGACCGC CGTGNCTGCC ACCACTCCTC ATCACTAGCA TCGATGACAT GCAGCACATN  
 CCCAAAGCGG AAGTCAAGG GCCTGGCTCA GGAAGCCG

SEQ ID NO:2303: (Length of Sequence = 403 Nucleotides)

GTGAGGGGCT CCAGATCATC CTCCTCAAG GCGCCGCGAG GCGCTCCTT GGCTCTGGC TCCTGCTTGC CGCTGGCCTC  
 CAGATGCTC ATGATGGAGT TAGGGATGTA AGCTTCTTG TGGGGGTGA AGGACGGAC ATGGGCTAGC AGGGCTCC  
 GGAGCTCTGG GCACTTNTCA AAGACGGCTC CCAGCTGCTG GGGCGGCANT GCAGGATGAC CTGGAAGCTC TGGGGCTTTG  
 TCGCTGGCA GCACTTGATG AAGCCCTCCC ACACCTTGG GTACTTCCAC AACTGCTTCA TGATGAGCGG GGACAGGATG

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TTCATGACGG AAGCCCCCA GCGGGGGTA CATGGTCANG GACCTGGATG ACGGTCTCTCA TGAGCAACAT GGGCAAGGGG  
GCT

SEQ ID NO:2304: (Length of Sequence = 376 Nucleotides)

ATCTTGCTAT GTTGCCAGG CTGGTCTTGA ACTCCTATTC TCAAGAGAGC CTCTGCCTC AGCCTTGTAAG AGCACTGGGA  
TTATAGGCAT GAACACCGC ACCCAGCCAA GATTGCCATT TTGTATGATG AGACTGGAAG GACCCCATG TTTCAGGATT  
TTGCTACAAT ATACAAAAA CAATCTGTGA GACAGTGGCT GGGCTTTTTT CTGCCTGAT TAGTTCAGTG CACATACAAC  
TTGGACCAGA GGATCTGGGT TTGAATCCA TCTCTGATAC TTCCCAACT GAGCTGTTTT CCTTATTTGT AAAGACTAAG  
ATCGCGTATG TCAAGAGCT CTGTAACTC TCAACACATA CAAAGTACTA CTGCTG

SEQ ID NO:2305: (Length of Sequence = 354 Nucleotides)

CTGCCAGCC TGCTCCTGGC CCGCTGGAAG CCTCCCCACA GCTGGTAATC TGGACTTAAG GATTGCTGGG CCACCGCTTC  
TCTGCCATACC ACCATTCCAT ATTTAAGTGG AGCCCCCTACG TAGAAAGGCC CCGGGGCTTT ATTTTAGTCT CCTTTTCAGG  
GATGTCGTGG GCGGGGGAGG GGGTTCCTGG TGCTACAGCC CTCTCCCCAC CCTTAAAGGG ACGCCGACGC TGTTTGCTGC  
CTTACCACA TATTAGTCT TGACCCTGGC AGGGGACCCC ATGGAAGAAG TGGGAAGAG CAAAATACAT GGAGACGAGC  
CACCCINCA GGATGCTCGC TTGGGATTCC CACG

SEQ ID NO:2306: (Length of Sequence = 345 Nucleotides)

CCAAGATCT AAGTAATCC AAATGCCTTA GATATCAATG AAAGCTACAC ACCATTGAGA TGGGCAAAAT TCTTTCTCTA  
CAAAGGGAGT AATCAAGTAA ATACCTGTCC TCTTTCAATG GACTGTGCC TATTGAGCAT TGTGGATGAT GTGTTTTCAG  
ATTTCCAGGT GAAGTCTGA CCTACCTGT TTGGCCAAAG ACGTAAATTG AGAGGAAAGG CCTTGGTCTT CCTGATCAAC  
CAGCAITTA CGAACAGTGG CTTAATGCAG ATCACTCAAG AGGNAGCATA GCAATGTAAA AGGAATATAA GTAGGTGTG  
GATGCCITTT TCCTAGACCA GGAAT

SEQ ID NO:2307: (Length of Sequence = 337 Nucleotides)

AACAGAATGT AAAAATACGC AAGTCAAAAC CTGGTAGAAC TGCATGGAGA AACAAATGGA TTCAATATTA TNAGTCGGGA  
AATTCAACGC CCTCCTATCG AAAATGGACA GATCCAGCAG GCAGAAATTT AGTAAGGACA TTGTTGAGCT CTGCAATACC  
ATCAATCAAC TGGATATAAT GGACATCTAT AGACTACTTC AACACAGCA GAAGATACAT TCTTCTCAAG CTCACATGGA  
ACATTCACAA AGATAGACCA CACGAGGCC CATAAGCAC ACCTTAACAA ATTTAAATA ATATAATCA TACAGTGTGC  
TCTCAAACCC NCAGTGG

SEQ ID NO:2308: (Length of Sequence = 216 Nucleotides)

GAGGAGTAAA CTNTTTCTG AGAAGCATGC TTAGGTGTG GGACAGGAAG TGGTAAAGGC AATGCATCGT CCACAGAGGT  
GGATGAAGCA GTNACAAAGG AATGATAATT TNANCTGCTG GTGGCATCTN CACTGCTGGA GTGTATGGCA GCAATCATCT  
TACTCTCCAT CATCCTGGT GGGGGCAGTN GTGCAGGAAA GCCACAGGGA TTCGCA

SEQ ID NO:2309: (Length of Sequence = 289 Nucleotides)

GGGGCTATGA AAATACAAA AACATTAGCA CATTATAGT ATGTATGTGT CTACAGGCAT TTNCCAGCC CTATGAGAGT  
NCTGCAATTT GAGAAGTACT AAAATGTATT GTTTGGTGAC AAGAACTGCA ATAAAAAGAT AAATGATTIN CTGAATGTTG  
TGGCAAGCA GTCTATTTCC ACTGCAATTT CTGCTACTT TACCTTAAA ATTGCTGAGA CAAAGACCA CTCTCTGAT  
ATNCTGCTGA GATCTAATGC AAAGTCTCT CAGANGCTTC ACTACACAT

SEQ ID NO:2310: (Length of Sequence = 359 Nucleotides)

CTGNGGGCTG CCTCTCGTTG GTCAAATCCA ACCAAAAGCT AAGAGCTGGA GAGCTTGGGT GGTGCATCCA AGGAGGCTTG  
CTTCTGGGG CACAGAAGGG AGAGTGGAGA AGGATGGAAA GTGGCTCTAG GGGAGGAAAT GGAGAACATC CAGAACTTTA  
TGTCACCTCT GGTGCTTGAA GGCCTTTCTC CAGGGAGACA AAAAGTTTGT NTGGCTAAA GCTCCCTGGT TGCTCAGGAG  
CCAAGGGTCA CATAATGTGC CAATGGGGT TTTTGCTCT GAAAGCCTCT GAGGTATAAT TACTTGCAAT GNAACATCC  
CTTTCTCTC TCTTCTCTG CCCACCTTC ATGCCAAGG

SEQ ID NO:2311: (Length of Sequence = 324 Nucleotides)

GTINGGGGCC GGCCTGGGCA ACATAGACAC CATCTCTTTA AACAAACAAA CATCATTAGT TTCTACATTC TACAAGGTGA  
AAGACTAATT AGAAGTGAAA AATACCACTG AAATGTTGGT GTACAAATGG CAGCATAATT TGATTACAC TAGATTTTAC  
ACATTGTGT CTATTCAAAA TAGGTACTTT TACATTTTCC TTAACATGCAT CTGACACAGA GTGAATCACA GATATATGTT  
GGTGTGAAA GCAGAGGTTA CTATTATTAA NCGAAAATTT TTGTGGTTTT GCAGTCATCA TATCTAATGT GGTACAGAT  
TGTG

SEQ ID NO:2312: (Length of Sequence = 362 Nucleotides)

GNAGTTTATA AAGCTTTATT AAACATTTCA AACAGCTGTG CAACGAACAC ACCAAATAAA AGCTCTAGAA TAGCAGTCCA  
GACGTTTCAC AAGTATGGCC TCACAGTCCC ATTCCCTAGA TGGACTGCCT CCAGTNCGTG NCTCTGCCGT GCCCATCTCT  
CTTTCCCTC AGGCAAGAGA GAGATGGATG GNTCAGACTG AAAGGACAGG CATGCTGATC TCCAGCAGGC AGGGGCCAGG  
AGAAAGTCTC GTTTGCCAAC ACTTGTTACT GAAGCGCAGA AAAAGCAGCA AGTGACAGTC ACAAAGTCTT CCTGGGGTAT  
TCTTCATAAC GTACAGTCTA TATGCGCAGG AACGAGGAAG CT

SEQ ID NO:2313: (Length of Sequence = 449 Nucleotides)

TGTAATTTTT AAATTAAGAC TGCCTTAGTG AGAAAATTC AGCAGGTGAG TTAAGGGCAC GAGGAAAGGG CCTTTGTGCA  
GAAGTAATGA CATAGGCAAA TTGTCAAAGG AGAGGTTCCC TGGTGTATTT NTAGAAGAAA GTAGACCCAT GTNTCTGAAC  
CCAGCACACA GTTCACTTAT GGTGGTTTTG AAATCTGCCC TGGAAATTNC ATGCATCTTT TAAATTTTTG GTTTATTTTT  
NCAAGAAATA AATGAAGTCT TTATTTTINC AATGAGGGCA ATGTTTATTA AGAACAGCAC ATAAGGTAGA AAAGAAGGTT  
GGTTTCTAAT CTTGGTTCAT CTCCCCACT GATCTTGAGT TTTAAAAGCA TAGAGAGCAC GATCCTTCTG TGGGGTCTCC  
ACTGTCAGAG AGCCTGTNCA GATGAGCAGT CACACTGTTA CTCCACAGC

SEQ ID NO:2314: (Length of Sequence = 316 Nucleotides)

CGAGGCAAC ACAAAGGGCT CCTCTGCTT CTCTGACCCC ACCTGCAGCA GGTAGTGGAT AACAGCCCCT ATGGCCTCCT  
TCATGACGCT CACGAGCTGC ACCTTCTGTG GTCCTTAAAG CAGTGACTGC TCACAGCGAG TGCAATTCCTG GNTCCCAAC  
TCCATGAGGG CATAGCAGGC GGTCAACACA TCCTCTTTCA CCTCCGTGCC CGTNTCCTCC AGTGCCAGCC GCACCTCCAC  
GNACGNCAGA TTCACCAGCA GGGCCAGGAA CTGCTCCCG GAGCTGCCCG CCGGATCCA GTCGGAGCCG CAGGTG

SEQ ID NO:2315: (Length of Sequence = 286 Nucleotides)

ATTTTATGT GTAGACAGGC TGTGGGTTCC CCTCACTTAA ATTGAAGCTC TGTGAACCTT GAGACACTTA AGANTCTTGC  
AAGINTGAAA AGTGGAGTGA AACAAAACCA TTTCTAAAAC GAAAATGTGT AACINCNTTC AGTTTACAC AGTGNAGAAA  
TAAGTATTAA ACAAGTATG CTCAAACGGT TATATCTTAA GGTCAATTTA TTCTGTATAT CATTAACATG ACATATCTTG  
GTTTAGAGAG CAGCACACAA GACATGTGT ACINTTTAAT AGCTAA

SEQ ID NO:2316: (Length of Sequence = 414 Nucleotides)



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AATCATAGCT TACTGTGGCC TCGATGTCCT GAGCTCAGGC GATCCTCTCC TTATAGCCTC CAGAGTAGCT GGGACTATAG  
 GTGCGTGCCA CCACACCTG CTAATTINAT GTTTTGAAGA GACCGGTCT CACTTTGTG CCCAGGCTGG TGTCAGACTC  
 CTGGGCTCAA GCTAAATCAC CCACCTTGGC TTCCCAAAGT GTCCGGATTA CAGGTGTGAG CCACTGCGCC CAGCTCTGAT  
 TTTTGTATTT CTTACTTAAG GCGACATACT TAGTAGCTGT GGTCTTGGG GCAGATACCT CCCAAAGCCC CAGTTCTGTC  
 ATCTATAAAT AATGTAACAA CAGGGCCCCG CTCGAGGT TGCTGTGTGC ACATATGTGT GTGTACGTAC CCATGTGCCT  
 NTACGAGAAG GGCT

SEQ ID NO:2317: (Length of Sequence = 166 Nucleotides)

GCAGTACTA TTATTAACAT TACAGTACCA AGCATCCGA AGAGACAGTC ATTTGINATT TTINATCAAG AAATAGGGCT  
 GTTTTAACT GTTATTGACA TCACTTTTT CCCAGTGCAT TTTTCAAAA TATTAATAAG TTCAATCCTT TGTGCTTTTA  
 ACTTCC

SEQ ID NO:2318: (Length of Sequence = 374 Nucleotides)

TTTATTTTAC ACTTACAAA GAAATGCCC ACCCCTTTC CCCATTCGCC CAAAACAGTC TCTTTTACA AACATTTAAA  
 AATTAAACC AATGAAGAT AGACAAGTA ATTTCAGTAC AATTATTTN CAGTGTAGCT GTCAATAATTA GAGTTTAAAT  
 TTCTACAAG TGACCAATGT CCAAGTGAAT TATAGGGAAA TCCTGATTAT CGGCCAAAGG AAATTCATA TTACAAGTTA  
 GCAAATCTT AGTACAAAA TAGTCOGTGT GTTGGAAAG CTTTTCCTTG TTACATAGGT CTTAGGTGAG TCTGCTGTNA  
 ATACCTTAAC GNTTCGGAT TCTNCTCA CAAATG AATCGTCACT GCTG

SEQ ID NO:2319: (Length of Sequence = 380 Nucleotides)

CATCTAGT CATGGTATC TCCTGGCAG CACTATTGT CTTGTGTGA GAGCAAATGA TAGAGTCATC CATTCAAGTT  
 AATTAGAGC ATCTGCATTG CAAACTGGT CACTAAATG CTGCCAAAT TTGAGGCTTT TTTCCTGCCA ACACAAATTA  
 ATTTTTAAG TAGCAGCATT TTCAGGAGAG ACCAAATAAA GAAAGCAACA ATAAAGTTGC CTGTCTAGTG AGATGTCCCC  
 AACTATCAA CTTTAAACAT ACCTTGCTT TTINATAGTAG TTCTTCACAC AACTGCCTT AATCAAAATG CGTGTCTCTT  
 GCCTGTCTAT TTTATGTTTT GGCTCTTTAG CAACCTAAT GTATGGTTAG ACAGATTCCT

SEQ ID NO:2320: (Length of Sequence = 348 Nucleotides)

GGAGTCTCT TGTCACGGA GAGCAGTGT GCAGTGTATG GAATGCTAAA TCTTACCCA AAGGGCAAGC AGGCTCCAGG  
 TGCCATGAG CTGAGTTGTG ACTTCTGGGA ACTAATTGGG TTGGCCCTG CTGGAGGAGC TGACAACCTG ATCAATGAGG  
 AGTCTGACGT TGATGTCCAG CTCAACAACA GACACATGAT GATCCNAGGA GAAACATGT CCAAAATCCT AAAAGCACGA  
 TCCATGGTCA CCAGGTGCTT TAGAGATCAC TTCTTNATA GGGGGTACT ATGAAGTTAC TTCTCCAAC ATTAGTGCAA  
 ACACAAAGTA NGAAGGTGGT GCCACACT

SEQ ID NO:2321: (Length of Sequence = 330 Nucleotides)

ATCTAGACTT TNAGTTCCCT GCATCTGCCA CCGTAGTTTC TAGCAGGAGT AGTGGGGGA GTAATACAGA TTCTNCCCTA  
 GAAGGGGACA CTGGTAACAT GTCCACTCT TGGATTAGCA GGGGTGGGTC CAGGAAGATG ATATTTCNT CTTTGGCCCA  
 CCCCCCTGGC ATTCAGCTGG ACCCACTAG GCCATCATGA GTGGCTTCTC CCTGTCTCC CCAGGGGTCA TAGGATATCT  
 ACACCGCTT TNGACCCA CCTGCACTC CCATCCTTC CTCTCTCCC GGTTTCATGCC CTGCACTACA TAGCACAGCC  
 GGGATGCTTN

SEQ ID NO:2322: (Length of Sequence = 352 Nucleotides)

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TTGACAAGTA AGTGTATATA TTTAAGGTGT ACAATGTGAT GCTTTGATAC ATACAGTGTG AAATGATTAC CACAGTTAGG  
 TTTAATAATT AACATATCCA TCATCTCACA TAGGTATGAT TTCTTATGTG TGTGGCGAGA ATCCTGAAAA TCAACTCTGA  
 GCACATTTC AAGTGTACAAT ACAGTATTTA TGATAGTCAC CATGCTGTTA ATCAGATTGC CTACCTTGGT TAAAGTGCAG  
 ACTCAGGTGA AGGTCTGGAT GGAGGATCAT ACTTTAATTG ATTTAGACTC TAAATAAAT GTATATAGTT ATTTTGTCTA  
 ACCTAANGAA CCTACTCATA AATGGGCTAG TG

SEQ ID NO:2323: (Length of Sequence = 316 Nucleotides)

GAGACAGAGT CTCTCTCTGT CGCCCGGGCT GGAGTGCAST GGCACAACCTC AGCTCACTGC AACCTCCGCC TCCCAGATGT  
 CCAAGTGATC AAGGGGTTTC ATTTGCTCTT GGGGGAATTAG GTATCATTGT GGGAGGAAGC ATGTGTTCTG TGAGGTGTGT  
 CGGCTATGTC CAAGTGTCGT TTAATAATAG TGGAGACGGG GTTTCACCAT GTTGGCCAGG CAGGACCTCA GGTGATCTGC  
 CCACCTCAGC CTCCCGAAGT GCTGGGATTA CAGGCATGAG TCACCACACC CGGCTTCATT TATTTTCTTA TCCATG

SEQ ID NO:2324: (Length of Sequence = 300 Nucleotides)

GGGGACAGGA GGTGACCTCG CGAGCAGACG CGCGNCCAN ACAAGCAAGC CGCCCCGGC CTCTCGGGAG CCGTGGGGCA  
 GAGGCTGCGG ANCCAGGAG GGCCGGAGCC CTCATGANTT CANINACCTG CTCTCCCCC TNTAGGTCTA TCAGCCACAG  
 TNTCTGCAAG TTTCCAAGAG CAGCAGAAAA TGAACACATT NCAGGGGCCA GTTTCATTCA AAGATGTGGC TGTGGATTTC  
 ACCCAGGNGG AGTGGCAGCA ACTGGACCTT GATGAGAAGA TAGCATACGG GGATGTGATG

SEQ ID NO:2325: (Length of Sequence = 303 Nucleotides)

CTGTCTCAAA TAATAATGAT AATATTNCT TATGCTTACT TTAAGTAAAG ATTACAGTAT ACATTACAAC ATATGCGTTT  
 ATTGACTGTT TATGTTATTG ATAAGGCTTC TAGTCAACAG TAGGTTACTA GTAATTAAGT TTTTGAGGAG TCAAAAGTTA  
 TGTGTGGATT TTCAACTGTG GACTTTGGTG CCTCTAACCC TGTGTTGTTT AGGGGTCAAC TGTGTATTCT TTCTGTGGNA  
 ACATTTTITAG ATGTTATAGC CTTTAGACAT TAGAAATGGA AATTTAGTTG AACTCNGTGT TTC

SEQ ID NO:2326: (Length of Sequence = 348 Nucleotides)

GTGTTCTCG TGTGGCAGT GACACAATCT CTCCCGTCCC TGGAGGCCAG CTCCCCCGTG GCCAACCTCA GGCTCCCAT  
 GGCATCTCAG GGCTCCTCCA GCCAGACTGG CGCCATCCAA TTAACCTGAT GGTGGCTGAG CAGCTCAGCT CTGTGCCAGC  
 CCTGTCAGGA GGCAGATCAT GTGTCCAGG CCCAGAGGT AGCCGTCTTC ACGGTTGCCN TCAGCCAGG GCAGCCTGTG  
 GCTGAGCGTC TGGTGGTCGG GCAAGGCCAC CGTCTTCCCG AAGTCTATCA TCCAGACCTT GGCCAGGCCG GTGTGTTGCT  
 GCACGAAGAG GAGGGAGCTT CCTACCAC

SEQ ID NO:2327: (Length of Sequence = 392 Nucleotides)

AGCTGTITTT TCTAGCTGC CAAGACTGTT GAGGAAGATG AGAGAATTC AGTACTAAAG GTATTGGCAA GAGACAGTTT  
 CTGTGGATGT TCTCATCTG AAATTTTGAG AATGGAGAGA ATTATTCTGG ATAAGTTGAA TTGGGATCTT CACACAGCCA  
 CACCATGGGA TTTTCTTCAT ATTTTCCATG CCATTGCAGT GTCAACTAGG CCTCAGTTAC TTTTCAGTTT GCCCAAATTG  
 AGCCCATCTC AACATTGGC AGTCCCTACC ANGCAACTAC TTCAGTGTAT GGCTGCAAC CAACTTCTGC AATTGAGAGG  
 ATCCATGCTT GCTCTGGCCA TGGTTAGTCT GGAAATGGAG GAAACTCATT CCTGATTGGC TTTCTCTTAC AA

SEQ ID NO:2328: (Length of Sequence = 256 Nucleotides)

ACGAGCACAC TCTTCACAGT GGGCCGAAC ATCAGAAAAT GGGAGCTTC TTCTAATGGC TGTNCTTTT TGTTCGGAAA  
 AAAAAAAG AAATCCTCCA AACCACCCG GATGGTTGTA AAAAGCTGCA ACGGAACCTT TGGCACCNGA TGAGAAGAGA

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GGCCTTTTAA TGCCATAGCT AGTGATGATT CANTCAAAGC ATCAGTCTAA GGAAGGATGA TGGGGGAAGG GACCNNAGAT  
CACAGNOCCT CTCCTT

SEQ ID NO:2329: (Length of Sequence = 383 Nucleotides)

AGTAGAGACA GCATTTTCATT ATGTTGGCCA GGCTGGTC TC GAACCTCTCA CCTCAAGTGA TCTGCCTGCC TCGGCCTCCC  
AAAGTGCGGG GATTACAGGC GTGAGCACNC ATGCCTGGCC TTTTTTTTTT TTTTTTTTAA CGAAGTTATT TTCTAGAGC  
ATTCATAGTT TGTTTTATA CAGTTAAGGT TCTATCCAT CTGGAATTTT TGGTAAAGTGT GGGGAGAATA AAATGAGGAG  
CCNCTGTTTT TTCTCCAAA TGGCATGTAT TGTCCTAACA CAATTTATTG AATCAATAAT TCATCTCTCC CATACGAATT  
TAAACTATTG AACTTTCACA TCAAAATTTT GGAACCTACA AGTAGGTTTA ACAAGGTGAG AAC

SEQ ID NO:2330: (Length of Sequence = 392 Nucleotides)

CGAAACGNIC TCAACCTATT CTCAACTTT AAATGGGTAA GAAGCCCACT GGTGAGCATG GCAAGCCCC AGCTCTAATA  
AAAAATGCAA AAAATGGCT GGGAGTGGAG GCGGGCGCCT GTAATCCAG CTACTTGGAA GGTGAGCTG GGAGAGTGC  
TTGAGTCTGG GAGGCAGAGG TTGCACTGAG CCGAGATCAC ACCACTGCAC TCCACCTTGA GCAACAGACT GAGACTCTGT  
CTCAAAAAA AAAAAAANT TATGCAAAGT GTCTTTTCCA ACAAAGTGT AATGAAGCTA GAAGTCAATA ACAGGAAAAC  
CTGGGNGAAT TTGCAAGTAA GTGAAAGTTA AACAACATTC TTAACCACTG GCTCAAAGGA GGAAATGACT GG

SEQ ID NO:2331: (Length of Sequence = 284 Nucleotides)

AAGAAAAGTA AATTCATCTT GCTCACAGTC CTTCTCGAA GAGTTAGAA AGCAAAGAAT TCACCGACTC AGCAGGAAGC  
AGAAGGAGCT GTTCTTCTT TTGACACGCA CAAGCTAATC CCCTAGAGAG TGGGGATGTG GGAAACGGAG GGTAAATTAAT  
TCTTTGGTCA CTGGTCACT GCTGAATAGC CTGGTCACT TTTGGCTCTC TCCTATTTTA GGGGGAAAAA TATTTTNGTT  
TCTTTTTTTT AAAAAATAAA ATGTTGCGAC AATGGGAGAA AATT

SEQ ID NO:2332: (Length of Sequence = 349 Nucleotides)

ATCTTAAAAA GATTTTTTGT ATTINCTTTT GAGACTGGGT CTCAGTCTGT TGCCAGGCT GGAGTGTAGC AGCCTGATCA  
TGCTCAGTG CAGCTCTAC CTCCCGGGC TCAGGTATC CTCCCTCTC AGCCTCTGA GTAGCTGGGA CTACAGAGGT  
GTGCAACCAT GCCCGCTAA TTTTGTATT TTTTGTGGAG ATGGGGTTTT GCCATGTTC CCAGGCTAGT CTTGAACCTC  
TGGATGTGAG CCACTGGTC TGGCTATTA TTTTAAATAT AGTTCTCTT ACTGCCAGTA GCTTTCATAT AACCTAGCG  
ACTAGATTTA GTCACCACTG CTTAATTC

SEQ ID NO:2333: (Length of Sequence = 353 Nucleotides)

CCACCTCTCC GTTCTCTGCT TCINAACCAC AGCGCATCC TATTGTCAGC CCTCAAGATT AAGGATGAAA ATTTGACTTT  
TTAATTTTAT TATCTTGT CTTCCTTCT ACTTCATTAG AATCATGTTA TTGGCTTAA ATACTGTATG TAAAGGATGC  
TCGGGGCCC ATCTGGAAGC CTGCATTCTC TGGGATATA ATTACGCTAA GCAATTTTTC ACCAGGGACA GCATGACTTA  
GCTTCTACCT GGGCATCTC TGGCAACACA GCGCTCAGT CTTCCTAAGG GATGGCTGC TGTCCCTTCA GGCCTTCTC  
TTGNGTGT GTGTGTGT GTGTGTGT TTC

SEQ ID NO:2334: (Length of Sequence = 279 Nucleotides)

GCGCCTCTCA CNAGCTGCTG CTGCGCNC CTATCTGGTG GCGATGCTGC AGCTGCTCTA CCTGTGCTG CTGTCCGGAC  
TCAAGGCA GGAGGAGCAA GACCAATATT TTAAGTCTT TCCCGCTCC CCAAGTCTG TGGCTAGCT CAAGGCGCTG  
TCCGACCGC GCTGGCCTCT GGAGGCTCC TNGAGCTAG CCGGATTTAC CGCTCTTACA GGGGCTGCT GAAGACCACC  
ATNGACCCA ACNATGTGAT CCTGGCCAG NAGCCAGC

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SEQ ID NO:2335: (Length of Sequence = 386 Nucleotides)

GCCTTTTGT CATGGTAGCA AAGTGGCTGC TGTGGCTCCA GGCATCACAC CCTCAATCAA GGTAGGAAGA AGAGGCCAG  
GGAGGTGTTA GCCATGCCTG TTTCTTTTAT TGGAAAAGCT TTCCAGAGG CCCAGGTAGA CTTCCTCTTC AATTTCATTG  
GCCACACCTG ATCACAATAG CATCCTAAGC TGCAAAGGAG ACTGGAACAG TGAAAATCTG GATTTCACAG CTCCACAGTT  
GGAGTGGCTG GAGATACAGA GTTGGGACGA CCCCTGAAAA GTGAACCAAG GTCGTCTGCA CGGCTGCCCT GGAGGGCGTG  
GTGCTTGAGG TCCCTTCTAC CTCTGGGGCT TCATGGAATG ACTTGTGTC TCCATGGAGC ACCTCT

SEQ ID NO:2336: (Length of Sequence = 258 Nucleotides)

CCCTAGCAAA CCACTGATGA CCGCCTGNA GGGGCCAGCC TGTCGGTGCT CTGGGCCTTG CAGCTNTTTC TNTAGGGTTA  
GCGGTGGTGC CGGGGTCACT TTCTGAATCT TTTTITTTTT TTTTCAAAAA GGAAAGTTTT TAATGGAAAG TTGAGCCAGA  
ACTAAACCAG GGAGCTGTCT GAAATCATAG CACCCCATCC GGGTGGCGGG GAGATCAACT CCGAGCTGTT TTTCCGAGGC  
AGTGAGGAAC GGTGCCGG

SEQ ID NO:2337: (Length of Sequence = 338 Nucleotides)

ATCTCTTTTC CCACITCATA AAAGCAAAAT ATGTAAGACT AGCATCTGGT TTTTGTCCTA ATAAAAAAT CCCACAACCT  
TCAAGATATC ACTCTAGCTT TCTAAAGTAG AAAGGCAATT CAGGCAACAA AAAATATTTT TTAATAATCT ATAGCCCAAA  
TCACCAAAAG GTAAGGAAAG AACTTTCCTA GCAAGCTCTG GAGAAGACCT AATTGTGNC ACAAATGGA GCTTTCAGAC  
ACTAATCAAG GCCATTAAAT AAAAAAATTT TTTAGGAAA ATAAGGCAGG TTGGATCTCT TTTCCACTT CATAAAGCA  
AAATATGTGG CAGACTCT

SEQ ID NO:2338: (Length of Sequence = 410 Nucleotides)

GGGTCTTGCT ATGCTGCCTA GGCTGGTCTT GAACCTTCA ACTGCAGTCT TGACCTCCA GGCTCAAGTG ATCTTCTTAC  
ATAGGCCTCC CAATGTGCCA GGATTATAGG CATGACCACC ATGCCAAGCT CCAGATGGTA TTCTTAATTC AGCTCACAA  
GTGCCCTCAT CAGATTGCTA GTGGCCAGGA GTGAACAACT GAGTGACTTT AAGAATCAGG ACACCAGGAA TATGTTCTTA  
GAAAGTGAAG GTATGAGTGG AAAACCTGGG TTGGATTATG AACAAGGCC ACATGTGTGC CAGAGTGGCC AGGGCAGGGA  
GCAGCAGCAG GTGCTGGTGA AAGGAAGGTG GATTACTGGG GGCAATGCCT GTCTTTGTGT TATGGGTTTC TTTTGAGGGA  
AGTAGATAAG

SEQ ID NO:2339: (Length of Sequence = 336 Nucleotides)

AGGGGAGGAG GGGGCTAAGG GCGGCTGGAG GAAGAGCGAA ANAGATGGAA GCCTTCCGC AGAAGGCAGA GCTGGGGCGT  
TTNTGAGAC ATCAGTATAA CGCTCAACTC AGCAGACGCA CACAGCAGAT CCAAGAGGAG CTGGAGGCAG ACAGGCCGNT  
CCTGCAGGCC CTCTCGAGA AGGAGGACGA GAGCCAGCGC CTCCACCTGG CCAGGCGGGA GCAGGTCATG GCCGATNTGG  
CCTGNTGAA GCAGGCCATT NAGGNCAGC TTCAGCTGGA GCGGCGCGG GAGGCAGAGC TGCAGATGCT TCTTGAGGGA  
GGAGGGCCAA GGAGAT

SEQ ID NO:2340: (Length of Sequence = 290 Nucleotides)

TTTATAGTAG GATGGGGGT TCTCCTTGT GGTGAGGCTG GTCTCGAAT CCGACCTCA GGTGATCCAC CTGCCTGGC  
CTCCCAAAGT GTTGGGATTA CAGGCGTGAG CACNCGCNC CGGCCTTCAG TTTCTTCTA GGCGTTCTG TACCCCAAAT  
AGCTGCTACC CAGAGNGCG GGGTTGACCT AGGCTGAATA TCCACTTGT TTTATGGAT GGCTNCTTC CCCCATTG  
CTTNNCCAGA ATATCCTTC AAGTTCANT TTCCAGGGG AGTCTTGGG

SEQ ID NO:2341: (Length of Sequence = 298 Nucleotides)

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TTTGTCTTAT TACCCGATTT ATTAGAGAGA TCTCTAAAAA GACGGGGTGT GGCGGGGGTA GGTGGGCGAG GAACCTGGGA  
 TGCAAACCAG TGTGTGGGCG CAGGAGTGGC TGTATGGTTT CANAGGCGCC CACCACTCTG GGTGTGAGGG ACACAGCACC  
 CTCGTCTCGG CGCTTTGGAT TINTACGCAC CAGACCACGG GGCGGAGGAA TGGAGTGGCA TCCCTGGGGG GAGTTAAGAC  
 ACACGAGGTT TGCAGTTTCA TTTTGTTCGA GAATCAGTTT GGCCATAAAA ATGGGACT

SEQ ID NO:2342: (Length of Sequence = 316 Nucleotides)

CCTGAACAAG GTGCTGGTGG TGTGGAATTC TCCAAGCTG CCATCAGAGG ACCTTCTGTG GCCTGACATT GGCGTCCCCA  
 TCATGGTGGT CGTACTGAG AAGAACAGTT TNAACAACCG ATTCTTACCC TGGAAATGAAA TTGAGACAGA GGCCATCCTG  
 TCCATTGATG ACGATGCTCA CCTCCGCCAT GAGGAAATCA TGTGTGGGTT CCGGGTGTGG AGAGAAGCTC GGGACCNCAT  
 CGTGGGCTTC CCTGGNCGTT ACCACGCATG GGACATCCCC CATCAGTCTT GENTCTACAA CTCCAACCTAC TCCTGT

SEQ ID NO:2343: (Length of Sequence = 380 Nucleotides)

GGAGAGGAG GAAGGTTGGA CCTTCATCAG ACCACTCCTT TCCCCATCC TCCAGGAGAG GGGGCAAGGG CAACCCACCA  
 TCTACCCACT TACTAACCTG GTCTTAACCC CCTTACTGTG CGCGTGTGTG TGGTGTGCG CACGCTCTGG CTGTTTGTCT  
 ATATGTCTAG CTCATCTAGT TCTCTTCTT AAGGGGATGG GGTTCAGGGG CTAGGGGAGG GGGCTGAGTT TCCCCACTTT  
 AGGAGGAGGT GGGGGCTATT TCTATGCAAA TAGAAATCAG CACATTCCTC CTACTTCCTT TTCTCCACT CCCCCATAT  
 CTTTAAAGTG TGAAGCAGA AAAGGACCTG CATTTTCTCT ACAATTGAGG AGCTGACATA

SEQ ID NO:2344: (Length of Sequence = 282 Nucleotides)

GGGAATATAT TTATGCAAT TTTATTGAAA TTTATTGTAA ATAAAGNTTT TNCAGTGGN CTAGAAAANC AGCTTGAATG  
 NCATTGACGA TTTATTGAAG AAGGATGACA TCCCTNCCAC TTATTGCACA AACTTGGTAG CTTTGAGACA AATACAGTAG  
 CACAGTCCGT TTGAAGATTT GTCCAAAAA TTAGTCCATA TTTTAGTGGC TCAGTGTCAA GNGTTCCCTC CCGTGTCCCC  
 CACTGTGTCT TCTGCAGTGA TACGAAGGAT GAATGCTTAA TT

SEQ ID NO:2345: (Length of Sequence = 256 Nucleotides)

CTTTATAGGA AGCTGCAAAA GAAATGACGA GAGCGNGATA TTTGTGGTAA GGGATACAAA GAACATACAA TTGTGTACTT  
 GAGAGGTTTC ATGGAACATT ATGACCCATC CAATGNAGAC ATCAACATTA ACAACAAAAA TTANTTGAGG AAGAGCAGTA  
 TGAAAATATT CTAATGCAGT GCTGTCCAAC AGAACTTTCT GTGGTGATGG AAATGTTCCA TATCTTTGTG CTAATACAGA  
 ATCTACCAGC CACATG

SEQ ID NO:2346: (Length of Sequence = 437 Nucleotides)

GTTGAGATTG ATGCTTCINT TTTTGTGTC CGCTGCTGCC CTCGCGCTGG GAGCCGAGCC GGAGGGAAGG CGGTGGAGAG  
 ATGATTGCAG AGTTGGTGAG CAGCGCTCTG GGGCTCGCCT TGTATCTCAA CACCTTGAGT GCGGATTCTT GCTATGATGA  
 CAGCGTGCT ATCAAGACTA ATCAGGACCT TCTCCAGAA ACTCCATGGA CGCACATTTT CTACAATNAT TTTTGGGGGA  
 CTCTCTAAC CCACAGTGGC AGCCACAAGT CCTACCGGCC ACTCTGCACT CTTTCTTTTC GCCTGAACCA TGCCATTGGA  
 GGGTGAATC CCGGGAGCT ACCATCTTGT CAATGTCTG TTGCAATGCA GCAGTCACTG GTCTCTTCAC AAAGCTTCTN  
 CAAGATCCTC CTTTGGTGAT TGGATACTGG ACATTCA

SEQ ID NO:2347: (Length of Sequence = 406 Nucleotides)

CTCGGCCCCC CTTTCCGCC GGGGAGAGC CCCAGGTTT AATATGACC TGTGTGAC AACCTCAGT TTGGAACCA  
 GTGGGACCAG CATGTTTGGC AGTGCACTA CAGACAATCA CAATCCCATG AAGGATATG AAGTAACATC ATCTCTGAT  
 GATAGCATTG GTGTCTGTG TTTTAGCCA CCAACCTTGC CGGGAACTT TCTTATTGCA GGATCATGGG CTAATGATGT

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TCGCTGCTGG GAAGTTCAAG ACAGTGGACA GACCATTCCA AAAGCCCAGC AGATGCACAC TGGGCCTGTG CTTGATGTCT  
GCTGGAGTTA CGATGGGAGC AAAGTGTTTA CGGCATCGTG TGATAAACT GCCAAATGT GGGGACCTCA GCAGTAACCA  
AGCGAT

SEQ ID NO:2348: (Length of Sequence = 363 Nucleotides)

GGCCTTTCAA GNAGCGGCG ANTTCCGCGA CCGCTGTAAG GAGGTACAGC AGATCCGCGA CCAGCACCCC AGCAAAATCC  
CGGTGATCAT CGAGCGCTAC AAGGGTGAGA AGCAGCTGCC CGTCCTGGAC AAGACCAAGT TTTTGGTCCC GGACCATGTC  
AACATGAGCN AGTTGGTCAA GATCATCCGG CGCCGTCGTC AGCTGAACCC CACGCAGGCC TTCTTCTGTC TGGTGAACCA  
GCACAGCATG GTGAGTNTT CCACGCCCAT CGCGACATC TACGAGCAGG AGAAAGACGA GGACGGCTTC CTCTATATGG  
TCTACGGCTC CCAGGAAACC TTCGGCTTTC TGAGNCAGCA GTA

SEQ ID NO:2349: (Length of Sequence = 332 Nucleotides)

TCCTCTACT GATGCTTTC AGTAGATTCA GAAGTGATTG TGGCAAACAT AGTATCTTGA AGGAAGAGAT CGTGTTTTGA  
TTAGCATCTC CCGAGCCTAG TTTTGTGTTT ATGTTTCATGG TATTGAGGAA ATAAAGATCA ATTTGGACTT CTTGCACCTG  
TTAATACATC CTAGTTCCTG ACTGCAGCAA AATGACTCTC AGTGCCCTT TCTCTCTTA GTGATTGCCT AAGATGACAG  
CTTCATTCCC TTTTAATTAT TATCCACCTT CTTCCCATC TTCANTTGT TTCTCAAGTG AGGGACTTGG CCTCTACTGG  
GACTCCACTG GG

SEQ ID NO:2350: (Length of Sequence = 339 Nucleotides)

GAGATGGAGT CTCACCCCTT CGCCCAGGCT GGAGTGCAAT GGCACGATCT CAGCTCACTG CAACCTCTTC CTCACAGGTT  
CAAGCAATTC TCCTGCCTCA GCCTCCGAG TAGCTGAGAC TACAGGGGTG TGCCACCATG ACOGGCCAAT TTTTGTACT  
TTTAGTAGAG ACAGGGTTT ACCATGTTGG CCAGGCTCGC CCCGAAGTCC CGACCTCATG ATCCACCTGN CTCGGCCTCC  
CAAAGTGCCG GGACCACAGG CATGAGNCAC CGCACCAGA AAAAGCAAAT CTCTTAGTAT TTTTCTCTT GTCCAAAGG  
TTCTGACCAT GTTCATGAC

SEQ ID NO:2351: (Length of Sequence = 354 Nucleotides)

AGAAGGACCT GAGTTGTGGC CAACAACAGG CTGCAGAAAG GCAATGCCAT CCTGAAGATT TCTCAACTAA GAGTCTGCAC  
CCATGACAGC CCACGAGAC CCTCGCTCCA AGTTTGTGGA GAAAGGGAAC CCGCTTGGCA GCATGTGGAA AGACCCACG  
ATGAGCAGCA GACACAGCAA CGCTGCCTCC TACATCTCGA CAGCATCTGT GTAAGACTCG CTAGCATCTG GTGCACACAC  
TGTATGAGAC AGCAACAGCC AGAACAGACA GCTTTACGTT GATGAACACA CAGACGGTGG CGCATGTTCA GAGATGCCGA  
GGGGACGCCG CAGTTCCCAA AATCACTCT GCCC

SEQ ID NO:2352: (Length of Sequence = 378 Nucleotides)

GTTGTTGTGTT TAGTGGAAAC CTCAAATCAA AAACAGGCTC ACGGTCTGAA TAGTCTTCTG GTCTAAGCAA CTCAGACCA  
GCGCCGCCAA GGGGAGGCCG CCCTTGTCTT GGCCCCGGA AGAGACGCG CTCCAGCCCC GACGCAGACC CCATGGCGCA  
CACAGGCAGG CAGAGCTCGA GGTNCAGGCG GCTGCCTTGC GGGAAAGTCG TGGGGGAGGG TCCCTNGCTG AGGCTGCACC  
AAGGGCTNGG GAGAGGCCCA GGAAGGGGAG AGCGAGCTGN GAGCTTGGGA TGGGAGCCGT GAGGTGGGGA TGGTTNGCA  
GAGGGGCAGA GCCAAGGNCA GAGGCAAGTT CTNGGGCCCC ACAAGCTTAT GGTGGCA

SEQ ID NO:2353: (Length of Sequence = 369 Nucleotides)

CTGCCTTATA TAATGTGGAT GCTGGGCACA GAGCTGTCT CTTTGACCGA TTCCGTGGAG TGCAGGACAT TGTGGTAGGG  
GAAGGGACTC ATTTTCTCAT CCCGTGGGTA CAGAAACCAA TTATCTTTGA CTGCCGTTCT CGACCACGTA ATGTGCCAGT

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CATCATTTGGT AGCAAAGATT TACAGAATGT CAACATCACA CTGGCATCC TCTTCGGCC TGTCGCCAGC CAGCTTCCTC  
GCATCTTCAC CAGCATCGGA GAGGACTATG ATGAGCGTGT GCTGCCGTCC ATCACAACCTG AGATCCTCAA GTCAGTGGTG  
GCTCGCTTTG ATNCTGGAGA ACTAATCACC CAGAGAGAGC TGGTCTTCA

SEQ ID NO:2354: (Length of Sequence = 363 Nucleotides)

GGAGAGGGAT TGGCATGGC ACCATGGAGC TCCAGGGCT TAGAGATGGA GCAAAGTTGG CCTCACCTTG GGGAAACCATT  
CCTGCTCCTG GATACTGGAA GACATTCTGC TGCATCTNAG GATTGATTCC AGTGCCAAAC TGTCCTCCTA TGTTCCTGT  
CATGCCCTCG CTCACCATGC TGTTCGGT GGGCAAGGAT GCTTCAGGAT TTNCTGCTAG TTGTGAAAAC GGGCTGGTAG  
AAGCAGGTGG GGTTCCTGGG ATTTGTACCA TAGTTTNGTG GATAGGGGAA TTGCTGTGGA GCACCTGAG GAAGAAGGGG  
GTINCCATT TNAACTGGTA GTCCAGATGA GGGAGGGAGG GTT

SEQ ID NO:2355: (Length of Sequence = 403 Nucleotides)

AACCAGGAAT GGAGGGCTC CTCATGTCTG AGGTAGAGTA AGACGGTGT AGGGGGCGGA CCGGGGGCG GAGATGAGCA  
CCGGCCGAC TGGGGCATCA TCCNGGCCA CCGGGGACGA TGGGCCGTGG GAGGGCTCAG GCGGTGTGG TGGCCACACT  
GCGAAGAATG GATTTTAA AACTTCATA GCGCGANTT TTTTCAGCT CCTCTTGT GGACACAAC TCAGGGCTCC  
CTGTCACTG GCTTTCGGG GTGGTCTCC CACTTGCAGA GTCTGGTCTC CACAGGACAC CGTCTTCC TTCCCTTCCA  
AGGGGACGN CCCACGACC CTCGCCCAA AANTAAAGGA GCITTTGTGT TGAAAACGCC AAGGCAAGCC GTCCAAGGA  
GCT

SEQ ID NO:2356: (Length of Sequence = 456 Nucleotides)

GAAAGAAAA CAATTGGTCA AACCACAAGA AACTGTAC CTGAGCCTG AGAAGCCAAT TCAGATTCAA CCTGAATTT  
GGTTGATTTG GATTAAAGTGA CGCAAAAGT CAATAGAACC ATTGANITTC AGAAATCATA AAGTTGCACT ATGCCAAAGA  
AAAGAGTACA TGTGAATCAA GCGTAGATAG AAAACATCAA GCCAAGAAAA CAACACANIT CACATAATTT TTTTGGCCCC  
GACAAAACAT TTAAGCAGTT AATTTTGT TGTTTTGT TGTTTGT TGAAGAACAN TTGTGGTCTT TCACATTTTC  
TTGGTGGGAG AGCAAAATCT GATCAGCATT AGTGCTGTGA AATACTTTG GNTTATCATC CCCCAGTNT AGGGTGAGAT  
CATGAGGAAA NTTTTGGCAG TCCTTCTCTC AGATTNGTT CACTNAAANT GCTTGG

SEQ ID NO:2357: (Length of Sequence = 412 Nucleotides)

CCACCCCATG CCCAACAGC CATATTGTCA ATAAATAAGG AATAACTGAA ACCAGACCCT TTAGGAAGAG ACAGAAATTC  
CATTACCCAG GAAACCACTC AGTGAAGATG CTGATAGTTC TGATATGTTT TTATGCCCTG CCCCCTTCCC CCAAAAAACC  
AOCCTGAGAA CCAATGTTT CTCCTCAAAG CCCATCAGCA CAGATTGATA ATAATATCAC TATCAAGCCA GGGCTAGTGC  
TTCTCTACAT ACTGTACTGT CACAGGTACA AAGCAAGCCC TGGACAGATA CTGTCTCCCT GCCCCACAA ATCCAGGGAG  
GAAAAAGACC AGGGANGCTT TGATTTCCTT GGGATTTAAA CCTCATGTTT AAAAAGGNTA ATAAAGGTGC TCGTACTTGT  
ATCTTCTTCC CT

SEQ ID NO:2358: (Length of Sequence = 399 Nucleotides)

AGATGGCAGC AGGTTCAAGT GGGGCCCTT GGATGCCTAA GCCTGGGAC GACTACAGCT ACAATCAGTT TTCCACATAT  
GGCGATGCCA ATGCCGCTGG TGCTTATTAT CAGGATTATT ACAGTGGTGG CTACTATCCT GCACAGGACC CGGCCCTGGT  
CCCCCCCCG GAAATGCCC CAGATGCTC CTTCATCGAT GACGAAGCAT TTAAGCGGCT GCAGGGCAAG AGGAACGAG  
GGAGAGAAGA AATCAACTTT GTGGAGATCA AAGGTGATGA CCAGCTTCTT GGGGCCAGC ATGGAATGAC TAGTCTATTC  
ACAGAAGAGA AAACCATGAA GTCATTGAGC AAAAAGAAAG GTGAGCAGCC AACAGGCCAG CAGCGGGGG AAACACCAG

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SEQ ID NO:2359: (Length of Sequence = 352 Nucleotides)

CTTCATTAAC AAGCTGCGAG AGAAGCTGGG TTGCCAGGAC GCCTTCCCCG AGGTGTACGA CAAGATCTGC AAGGCCGCCA  
 GGACTGAGCT GGAGCCCGCC TGGAGAGACA GACACGTGTG AGTGGTCAGG CATCTTCCCT TCACTCAAGC TTGGCTGCTT  
 TCCTAGATCC ACACTTTCAA AGAGAAACCC CTCCAGAACT CCCACCTGA CAGCCCAACA CCACCTTCCT CCTGGCTTCC  
 AGGGGGGCAG CCCAGTGGAA TGGAAAGAAT GTGGGATTG GAGTCAGACA AGCCTGAGTC CAGTTNCCCG TTTAGAACTC  
 ATTAGCTGTG TGACTCTGGG TGAGTCCCTT AA

SEQ ID NO:2360: (Length of Sequence = 359 Nucleotides)

TTTTTTTCAG CATAGTCATC TTAGCTTTAT TGAGTAAGGC ATCCCAATCT CTGCTAAGAT TCINCTAAAT GAACGGCTGA  
 TTTTCCTGCC AAACATATGCA TTGGTCAAAG AGAAATCACC ACCTGGCCAC CCCATTCTGT CCCCTACAG GACACTAAGG  
 GTTCTTACAG ATAAAGGGAC GATGCATTCA TGCCTGGAGA ACTAATCACA CCTGATTTCT CTGGGATCTA AANTAATGTC  
 AAATTTTGAT TCACTTTATG TAAAGAAAAA TCCTTTTINTT TTINTGCAAA CCNCTTTCAA GANCAATGCT GCCCATCCCA  
 TGCAAGATGT TGTGTGAAGG CCANCTCTG GTATACTAA

SEQ ID NO:2361: (Length of Sequence = 437 Nucleotides)

CTCCAGGATT CCAATCCAGT CCGAACTCAA CACGAGGGGT GGCACCTACA GGCTGGGGTC AATCTGGAAG ACTGCCTGTT  
 GTATGGCCTG GCAACTAAAA AATGTTTTTT ACATTTTTTAA ATGGTTAACA AAATTAAAAAT AAGAGAATAT TTCATGACAT  
 CATCAAAATTA CAGGAAATGC AAATTTACAG ATCTACAAAT ACAGTTTGAT TGGGACACAG CCACCTCAT CCGTTTGCAG  
 GCTATCCCTG GCTGCTTACA GGGTCCACAT AGTCCATAAA GCCTGAGGAT ATTTACTATC TGGCCTTTTA CAGAAAAAGG  
 TCCCCAAACA CTAAATCTGA AATGTTTGC ATCAGAAACC CTGTGGGGC TTGTTAGGAA TGCAGCTCCC TGGTCCCACA  
 NCCAGTCTCT GGATTCAGTA AGTCTGGAGC AGGGCCT

SEQ ID NO:2362: (Length of Sequence = 317 Nucleotides)

CTTCTCTGGA TGTGCTGGG CTGGACTGG CTAGAATCTT TCTCTGGACT NTGTCATGTA CAGTGNCTCC ATCCTGGAGG  
 CAAGAGAGTT GGGAGTGGCT CGAATCANAG CCGTGCCCAA GATATCCCTN CTGTGTCATC GTTTGAAGCT GACGTCTGT  
 GTCINACAC TGCTGCCACT GTTGTNCTCT CGNCTGCTT GCTGTGCTT CAGGCCAGN CCCGTCTGC CGTGACANCC  
 TTCATCCTAC CCTTGAACC CCAAGCCAA GTTGGTTCAA ACTGTTGGAG AACAGAGTTG GCCTGCATCT TGGAACA

SEQ ID NO:2363: (Length of Sequence = 412 Nucleotides)

GTCAGAGINT TGATAGTTCT ACTGGGAGAC CACAAAATGA CATGGTCCAT CCTCCTCCTT ATCCAAAGAT GCATGGTTAA  
 AATAATATAG ATTAGGAATC ATCGTTACCT CCAACAGTT AATTCAATTC AAATTTTATG CCCAGACTGG TTTTAAAGA  
 CATTTTCTGC CAAAATTTT TGGAAGTAAA CACATTAAGG GTAGGTGTGG AGAACGATTA ATGGATTCAT TTTTATACTC  
 ACATCTGTTT TGGAAATATA TTTTATGCAA TAAAGCATAA ACTAACAGGT ATACTTATAA ATGTCTGGTT TTAGAAACAC  
 TAAAAGATCT CCAATCTTAG GAGGCCTTAA TTTGAAACTC TGCTTTTATT TGCCTGAACT AGTGGCTAAC CTGINTAGGC  
 ATCTCAGAG GG

SEQ ID NO:2364: (Length of Sequence = 334 Nucleotides)

GAAATGATTT AATATTAGGA AAGGCAAGIN CCTCGAGACA TTTATTTAAG CTAATCTGTC CTGTATTTTT GACTTTCAGA  
 TTCATACAC CAGCCACAT TAGCCTGCAC CATTAAAAAC ATTGATTCAA CCTCTCTTAT TGGCATAAC AATATATCTC  
 CCTTGTTCAC TACTCTATCC TCAGCTTGGT ATTTCTCTAG CACAGAAGAA TGGTCCAGTA GATATGCTGA AGAAATACCT  
 GAATGCATAA ATAAATAAGA AAATGAGAGA CTGAATGANT CAATTAATAC CTCAAGTGTT ACCCTNGATA AGGTCTAGA  
 GAGGGGAGGT TCTA



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SEQ ID NO:2365: (Length of Sequence = 423 Nucleotides)

TTTTTTGCCA TTAAATAAGT ACTTTTATGA TATTATATCA CACAGCACTT TACAGTATAC TCAAAGATAG CCTAAATTAT  
GAATTAAACA TGCAAAATATT TNCTTTTCCA AAATGTGGAC AAAATGTCCT TTAGAGTGCT TTTGAACACT AGCCTTAGCT  
ACTAAGCAIT CATGGGTTTG ATCTTTCTTG CGACATGACT TTAAGTAAGT TAACAAAAA TGTAGCTGTA GACAGTAATT  
GTTTGATAAA TATGANCACT TTTAAATGG CACTGAATTT ACATCTTTAA TCATTTTAAT AGGGCCATCC ACAGCCTCTC  
TTGTGCTCT AATTCTCAAC CTCGGGGTC TTAAAGGGC TGGTAAAGGC TCAGAAAGTG NCCAGCTCCA TGTGGGGTCT  
CTGTAAGNNG TCTATGCTT CAT

SEQ ID NO:2366: (Length of Sequence = 294 Nucleotides)

CCAGCCATAC ACATGCCTTT ATTTAGATCA GCTTTTTC AATGCAGCC AAACCTATGA GTTGGACAGC CCAAAGTAAC  
CAGCCCTATT CCACTGAGTT AGTTTACCCC ACAGCAGTAG AACCCAGTGC TGGTTTGGTT CCTGGCCCAT GGTGGGACAG  
CGTGAAGGTG ATGGAGGGCT CTAGCACAAG GAGGTGCTGA GTGCCACCG CAGGTGCTTC TGCAGACAGC CTAGACCAAG  
GTAAGCAGGA GCACTCGNTT CAGAACCGAG GCGGCTCGGA CCAGAGGGCA GGCA

SEQ ID NO:2367: (Length of Sequence = 393 Nucleotides)

ACGGACAGAG CGAAGGGGAG AGGATGGTAG TGTCTGACTT CCACGTTTTC GTCAGGGATG TGTTCAGCA TGTGGATTCC  
ATGCAGAAAG ACTACCCCTGG GCCTCTGTC TTCTCTCTGG GCCACTCCAT GGGAGGCGCC ATCGCCATCC TCACGGCCGC  
AGAGAGGCGG GGCCACTTCG CCGGCATGGT ACTCATTTTC CCTCTGGTTC TTGCCAATCC TGAATCTGCA ACAACTTTCA  
AGGTCTTTC TGGGAAAGTG CTCACCTTG TGCTGCCAAA CTCTTCCCTC GGGCCCATCG ACTCCAGCT GCTCTCTCGG  
AATAAGGACA GAGGTGACA TTTATAACTC AGACCCCTG ATCTTNCCTG GGCANGGGCT NAAGGTGTGC TTT

SEQ ID NO:2368: (Length of Sequence = 187 Nucleotides)

GACTTTGAAG TTAAACCACT GTTGAAGTT TTGGTGGGA AGACAATTNA GCAGTCTCTT CTGGANGTAA TGGAAGAAGA  
AGAGCTGGCT AACCTGCGG CAGTCAGCG TGAGTATGAA GAACTACGGA ATAGTGAAG TCCTGAAGTT CAACGACTTG  
NAGAGCAAGA NAGGCGACAC CCAGAAG

SEQ ID NO:2369: (Length of Sequence = 341 Nucleotides)

GTATCTTTAG TAGAGGCGGG GTTCCACCAT GTTGGCCAGG CTGGTCTGCT ACTCTGACC TCAGGTGATC ACCTGCCTCC  
TCGGCCTCCC AAAATGCTGG GATTACAAGC GTGAGCCACC GCGCCTGGCA CCATCAGTTT TTGATCCTGA TACTTGTCTG  
TCTCTTGGT TCTCTCATC CTAATTTAA CCTTGAACAC AAAATTCAAC AGGTTTGGC ATATAGAATA AAGATTATCA  
GGCAAAGGCG CACTCTTGAC CTAATGATAT ATCTACATTT CATTTCTGA TCTATCAGCA ATATTAAAT TGTCTAGAAA  
TGATGAGAAG TTTAGAGGAG G

SEQ ID NO:2370: (Length of Sequence = 337 Nucleotides)

AGATCAAGAT CTCCTCCAAA ATGCCAGTAT GCAAAGGACA CTGGGGCAG CCTCTCAACA TTTCTGCCT GACTGATATG  
CAGCTGATTT GTGGGATCTG TGCTACTGCT GGGGAGCACA CCAACATGT CTCTGTCTT ATTGAAGATG CCTATGCTCA  
GGAAAGGGAT GCCTTTGAGT CCTCTTCCA GAGCTTTGAG ACCTGGCGTC GGGGAGATGC TCTTCTCGC TTGGATACCT  
TGGAAACTAG TAAGAGGAAA TCCTACAGT TACTNGACTA AAGATTCAGA TAAAGTGAAG GAATTTTTTT GAGGAAGTTA  
CAACACACAC TTGATC

SEQ ID NO:2371: (Length of Sequence = 320 Nucleotides)

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CGTGGCCGCA GAGGCAGCTG AGCATGAGGG ATGGAGCGTG CTGCTGTCTT GCAGGTGCCG TTAGCCCTGT TTTGCACTGG  
TGGATTGATC TGCTCAGGCG CACAGGGAGA TGGCACAGCA GGACCCGCG CCCAGCCTCG CTGAGGGCAT GCTCCCGCCT  
CACCTCCAGA GGCTGTTGGG CGGAAGCGAG AGCTGCAGCA GTTGGGGCCA GCNTGGGACT GGAGGCCAG GTGAATCTTG  
TGGGGCAGGG GACGGAGCTN AGGCTGTCCG GCCCGGGCCC TTCCACCCA AAGGCCCTAG AACCTAGGC CTTCAATCCT

SEQ ID NO:2372: (Length of Sequence = 326 Nucleotides)

AGGCCTGGCA TGCGCGGAAA AGTTCCTGGA GAAGGCCTCC CCTCCCCAA AACACCCGAG AAACGTGGGG ACCTCATTAT  
TGAGTTTGAA GTGATCTTCC CGAAAGGAT TCCCCAGACA TCAAGAACCG TACTTGAGCA GGTTCCTCCA ATATAGCTAT  
CTGAGCTCCC CAAGGACTGA CCAGGGACCT TTCCAGAGCT CAAGGATTTC TGGACCTTTC TACCAGTTGT GGACCATGAG  
AGGGTGGGAG GGCCAGGGA GGGCTTTCGT ACTNCTGAAT GTTTTNCAGA GCATATATTA CAATCTTTCA AAGTCGCACA  
CTAGGA

SEQ ID NO:2373: (Length of Sequence = 361 Nucleotides)

AGCAGAGCTG AGGGAAGCG TAGGATGGCT CCAGCTTCG GTCACTGGCT ACATGGTCAG TTCCATGATG GCGTTGACGA  
TGTCCTGTG GTTGTNTCTC AGAGCCCGCA CGCCTTGGC CCTGGACACA TTGGCCTGCG CCATCACCAG CTCATGTCA  
CGCAGTTCCA GCCCCGCTC GTCCACCTCT TCCTCTCTCT CCTCTCTCTC TTCTTGAC TCCAGCCTCA CCGGGGGCCT  
GGGTGCTGAC TCAGGGACCA AGGCTGAGGG CTCGTAGGGA ACCTTAACT TCTCAGCTGC GGCCTTGTC ACTTGCTGGG  
ACAAGGTCCT CAATCTTGN CTGCCAAAG ACCACATAAG T

SEQ ID NO:2374: (Length of Sequence = 281 Nucleotides)

TGACTCTAGT CTGGCACTTA TTGATGACAT TGAGAGGCTG AAATATGAAA TTNCAGAGGT GATGACAGAG ATCGACAATC  
TAACTTCGT AGAGGAGAGC AAAACGACTC AGAGGNACAA ACAGATAGCC ATGGGAAGAA AGAAATTCAA CATGGNTCCC  
AAAAAGGGA TTCAGTTCT AATAGAAAT GACCTGCTAC AGAGTTCCCC AGAAGACGTC GCCCAGTCC TTATAAAGG  
AGAAGGCCTA AATAAGACCG TCATTGGGA CTACCTGNGG T

SEQ ID NO:2375: (Length of Sequence = 391 Nucleotides)

ATGTTTAGTG CTCTCTCAG GAGCTCTGT AGGSCAGTC TGGTGGTGAC AAAATCTCTC AGCATTGCT TGCTGTAAA  
GGATTTTATT TCTCTTCAC TTATGAAGCT CAGTTTGGCT GGATATGAAA TTCTGGGTTG AAAATCTTT TCTTTAAGAA  
TGTTGAATAT TGGCCCCAC TCTCTCTGG CTGTACAGT TTCTGCTGAA AGATCTGCTG TTAGTCTGAT GGGCTTCCT  
TTGTGAGTAA CCGACCTTT CTCTCTGGCT GCCTTAACA TTTTNCCTT CATTTCAACT TTGGTGAATC TGACAATTGT  
GTATCTTGA GTTGTGTTT TCGAGGAGG AACCTTTGT GCGTCTCT GTAAATTTCC CGAATTTGAA A

SEQ ID NO:2376: (Length of Sequence = 324 Nucleotides)

CCAGCCCTCC CTCAGCTGG AACACAGCCA GGTGCCCTCA GACCCCTGN TCTGCACAAG GGGGGCTGC CCCCTCGCCC  
CAGCTATATA CACGACAGCC CATCTGCTG GCGTGGACA AAAGCTGGA GCTCTGTG CAGTCAGGA GCCCTACAG  
TCCACCAGT GCGCGGCCG GTCCAGGGC CCACTGTGTT GCCAGNAGT TTNTCAAAC CNAGGGCCA GCCCCAGCTG  
GNCCTNGCC AAGCCCCAGG CTGTTTGT GGGATGGAG CTCCACTG AGGCTGGTAA AAGCTTGAAC TCAACAGCAG  
CAAT

SEQ ID NO:2377: (Length of Sequence = 357 Nucleotides)

GTATATGTT TTATTTATGT ATTTAACTG ACTTATTTGT GTATCCACT AGAACAATAC ATTACAATA TACTTGACAG  
ACTGTGCTG GTGCGTCATG GGAGCAGAGA ACTGTCCAG TGAATAGTTG TTGAAGAAAG GAGTAAATC TCCCCAAC

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CCTAAAGGCA TCCTTTTGGT AGTGTGTGTC CCATAGGTAT GGCTGCTGAG CACCAGGGCT GCTCACCATG CTCCCAAGAA  
GCAGAGTCAG GGAGGCAGAC AGCAGGGTTT ATTAAGGTGC ACACCCATGT CTGAGCCCCA GCTCTCTCCG NCTTCTGTGG  
GGAGGAAGCC CTCGGTCTT TCCGAGGAAC CTTCAA

SEQ ID NO:2378: (Length of Sequence = 454 Nucleotides)

GACGGGTCTT TCAATAGCAA GTTTTCACCT CATCGACAAC ATCACGAAGG TGGTAACAAA CAAATGCTTT ATCAGGCTGG  
ACTTCATTTC AAATCCCCC AAAGCACAGA TCCATTACGC ACATTIAAAG ATACCATCTA CCTTACTCAG GTGATGCAGG  
CCCAAGTGTGT CAAAACAGAA ACTGAATTCT ACCGCCGTAG TCGCAGCGAG ATAGTGGATC AGCAAGGGCA CACGATGGGG  
GCACCTTATT GGCAGTTGAA TGACATCTGG CAAGCTCCTT CCTGGGGCTT CTCTTGAGTA CGGAGGGAAA GTGGAAAATG  
CTTCATTACT TTGCTCAGAA TTTCTTTGCT CCACGTGTGC CAGTAGGCTT TTGAGGAATG AAAACACGGT CTATATCTAT  
GGGTGTGTCA GATCTTCACT CGGATTATTC GATGACACTC AGTGTGAGGA GTCC

SEQ ID NO:2379: (Length of Sequence = 224 Nucleotides)

GGAGAGACC TCACAGGTA TTAAANGTGT ATTTINTGGA CCTGGGCTTG GCTGGAATGC TCAGGGGTCC TGAAGATCCT  
ATTATAGCTT CCTTCTGTTG AACCATTAG AAAAGATGGC GANAGTCAAC ATAAGTAGAG ACCTCATCCG TAGNAGATCA  
AGGAGCGGGG TGCCCTTAGC TTINAGCGGC GCTACCATGT CACTGTCGCC TTTATCOGGC GGCT

SEQ ID NO:2380: (Length of Sequence = 274 Nucleotides)

AGGTTTGAAA TATCTTTTTG CAATAGATAA TCTTATTTAC ATTAATACAG AATCATTTTA CATTCCTAAA TCAGACACTA  
ATAGATGCTT TATTTTAGTG AATTATAAAG GAAAACAAA AGGAAACTGT TGAGAAGTGT TCTTCATTAA CCNGTCTAAC  
GNCAGCCCGA AGATCCNGA ACACATGGAA ACTGCGNCAT GCTNCCNGCA GAGGCTGGGG AATGGGGGTT CTGCTCTCAC  
TGAATGGTGG GGAACCTTCA ACTGCTTAGC CTGT

SEQ ID NO:2381: (Length of Sequence = 312 Nucleotides)

GCACAAACAG TTTTATTTGA TGANCCACAG TGAATAACAG GNTCAGAAGA CAGTGCAGAT ATTCTGAAGA AGGCACTGNG  
GGAGGTAAAG GGGTATCACA GCAGGCAGCC TCCTCTGNTT CINTCCAGT TCACAGATGA GTTCCAGGCA GGAAGTCTCT  
GCAGGTCACC CACGGCGGCC TCAGAGGGAC AATTINTTCC CTCTAGAAAG CCINTTCCAG TGTTCACTGG ATGNTTTGAG  
GACAGNTCTG GGCAGAGGAG GTGACTCTGT GAAAGATGCT ATCTTAAGAT GGGGAGACTA GGCTGTGAGG AG

SEQ ID NO:2382: (Length of Sequence = 402 Nucleotides)

CTTAAACTAA CTTTGAAGCA AGTAATGTCA ACTTTGAGCA CTTTGTGAG TTTTGAAAAA TCTTATTTGT TGCTGCACAG  
GTTAATAAAT TATCAATTG TAATTCAGCA TGTGTGTCAG AGACACGGTC ACTGATTAC ACCCAGTCCC TGCCACAGAC  
CGTCTCAGAC ACGCACAGTG GGCCTGCTGC ATGATTACA CCCAGTCCCT GCCACAGACC GTCTCAGACA CGCACAGTGG  
GCTGTCTGCA TGCGTGTAC CTGGCTTTTG GCTCCAGCT CACTCATAGC CATGTCCACA TGGGGGGCTT GCACACAGGA  
TCACTCACAT ATGTACATGT ACCCACCACA AACGTGCAA GCTCCTTGCA CACATGCATG CACACAAACG TGGTACACAA  
GT

SEQ ID NO:2383: (Length of Sequence = 406 Nucleotides)

GACCCCTTTC ACTTAGCCCT CTGGGTTTG CAACAIGCTT TCTCTCTCAC CTTCTCATTG AATGAGAAAA AACAGCCCAG  
CAATTTTTTG CAAACAGTAA AGCAACAGAG TGAATATGGC TTGCTCTATC TCACTTCACT TTCACAGTAA CTCTTTTCT  
TGTAGGCAGT CCAGGCATTA TTAATTTTCAT TTTACAGATG ATGCAACTGA GGCTCAGTGT GGTGAAACAT TTGGCTCAIA  
GCCACACAGC TGATAAGCAT CAGGGACTTG GGACCTAGGN CTTACATTT CAAGTCAGCT GTATCTGTCC CCAAGCCCCA

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CCAGACTTCA TGTGAAGGTG GCTGCTTCTG GGGTGATGGT GGCTGGAGAG GCAGACTTTG AGGCTGCCAT GCTCTTATTT  
TCAGAT

SEQ ID NO:2384: (Length of Sequence = 165 Nucleotides)

TTAAGACAAT AATGAAAGAT TCTGTACAAA GTTACCAAGT CTACAGGCTG AGCGAGCCAA GGGTAAGTGG GGCCTGATCC  
TTGTGGACGA ATGTCNCCCGG GAGAGCTGGC CTCACCTGGG GGAGGCACGT TGAAAAGTA CACATTTTACA GGGCTCGGGA  
AAGGC

SEQ ID NO:2385: (Length of Sequence = 297 Nucleotides)

GGTTTINATT CATCTCTTC TATTAACCTC TCTAAAGGAA ATTGGGCACC TGTAAATCCCA GCACTTTGGG AGGCTGAGGT  
GGGTGGGTCA CTTTINAGGTC AGGAGTTCAA GACCAACCTG GCCAGCATGG TGAAAACCCA TCTCTACTAA AAATACAAAA  
NTAGCCAGG CTGGTGGTGT TCGCTGTAA TCCAGCTAC TCAGGAGGCT GAGGCAGGAG AATTGTTTGA ACCTGGGAGG  
CGNGGTTGC AGTGAGCTGA GATCGTGCCA CTGCATTCCA GCCCAGGGTG ACAGAGT

SEQ ID NO:2386: (Length of Sequence = 290 Nucleotides)

AAAAAATAAA GTGAATTTAT TGGTTCATGT AACTGGAAAG TCTCATGAAA ATGTCAGCTT CAGGAGAAGC TTGACCCAGC  
AGCTTCATGA TGTATGGAAA TACCTGGGT TTTTGTTCCT NCTCTGCTAC TGTGGTATCA GCTTTATTCC AAGTCTGGCT  
TCCITTTGTG TTGCAAAATG CTTTGTGAGA AGAAGCCTGG GTCCATCTGT TAGENTTAAG TTTACTCTGT ATGCTGTAGT  
AGTGGCTATG ACAAGATTAG GAAGTGTAAT TTCTCCTCCC ATATTTAAAG

SEQ ID NO:2387: (Length of Sequence = 356 Nucleotides)

GTCATCTGTA TTGTCACATG AAATGCACAT CCAAAACGGG TGAATTGGAA ACGACCTATT AGGTCACAGG GAGTCCGGCC  
CCTGGGGGCA AAGCCTCATC GATGCCACG GCGGTGGGCC AGCACTTTCC TTGGGCTGTG GCGTGTGCAC CCGGCTCC  
CAGCGGAGAG TCAGCTCACA CCCCAGGCC TTTAGCTCTC TGGCAGCAGC TCCCAAAACG CACTTGAGGA ACCAATAATT  
CCTTGGGGGT TAATAGCTGT TCCCAAGAA AAGGTTCTG TGGTCAAAT AAGTTTAGGA AAACATGGGT TAAAGAAGGT  
TTAGGCAAGA AGCTTTTCTA TAGGGCTTTG TCAGAG

SEQ ID NO:2388: (Length of Sequence = 226 Nucleotides)

ATTATTGGTA TAAAACTTA AGACGGCAIT AGAATTCTTA AGAAAAGGTG TAAAATTTAA AAAGATGTGC AAACAACAAA  
GAATGCCCGA CCTGAACCA GACCTAAAGC ACCTTCCANT TCCTCCACAC ATCATGCCCC AACACCATCC AGCCCAATCG  
GACACCAGGA CAGTGAGGGA CGGGTGGCTG TTCAGTGGGC AACAGATCTG GAAGGAAAGA TTTTCA

SEQ ID NO:2389: (Length of Sequence = 250 Nucleotides)

CCCAGCTAGG CCTTGGNATG GCTNCAGTGA GGAGAAATCC CGGGAAGTGT ATTGAACAAA AGATTCTINAT TGCACTTGTA  
TTTTINTATT AAAGTTTGCA TGGTTTCTAA TAAAGGATTC AAACATAAGT TTGTAGTGAA ATGGCCTGGN AGATTCCAAG  
GGCTTCTCTN GAAGGGGGAT TNGCTGCAN TGTAGATTN CCTCTGAAGG AGGCTGGCCC CAACTTGGN CCTCCTCATG  
ACCCCTCTCT

SEQ ID NO:2390: (Length of Sequence = 371 Nucleotides)

CCTTTTCTG GAGAACGGGG TCTCGCTATA TTGCCAGGC AGGTCTCGAA CTCTGGGCT CAAGCTATCC TCCGCTCT  
NAGCCTCCGT TTCCAGAAGG TCACCAAGTA ATATCTGCNT TTCATCAGTT GCAGTTAAGA TTTTNTTTC TTGAAATACT  
GGTTTCAAA CAGATCAGAA TTACCTGGGG AGCTTGTTTA AAATATAAAT GCCCAAGGC CAGCTCCAGG ACATTCTGAC

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GAATTTTTTT ATTTAGGTGG ATGCATTTTT NGTCGTGTTA CTGCTCTTCT CAGCTTTATT CAATAAACTT GCATTTTAAG  
GGTTGTATTG GCAATTTTAA CTTAAATGT GCATCATGAT GGAAGGTGCA GACCTTTTT

SEQ ID NO:2398: (Length of Sequence = 421 Nucleotides)

GACAGGTGG TCTTACCCAC TGGNTCCAG TCATGCTGTA AACAGGGCTT GCTTTGGAGT CTGTCAGACC TGGCTTAGAC  
CCAGGCTCTG ACCAAATGGG TGAGTTATGC AGCTACTTGG TGGCATCTAA TACCCATCG CAAAGGACTG CCGTGAACAG  
GAAGGAGGTG TCAAATTTGG CAGTGCTGA TGAGGTGAGG CCAGGACCCA GGAACCTCTA TTCCCTCCCA TGCTCAGGAA  
CAGTAAGTGT TCTTCTATCT GCAGAGGTAG ATGCTTAGCA CATCGTGGGT ACTTCACTCA TGATTGCTAA AATTTGAATT  
TGTTGATAAA GTCATTTCAA AAGTCAGATT CTAGGACCAA AAATACAATA TCTGTCCAAC ATGGAAGTGT TAGATCATGG  
TTTTTCCTTC CAGCCCCAGG A

SEQ ID NO:2399: (Length of Sequence = 392 Nucleotides)

GATAAGCTTG ATATCGAAAG TNCCACAATG GGTGAGTGT ACCAGGAACA CCATGAAGAA GACTTCTTTC TCTACATTGC  
CTACAGTGAC GAAAGTGTCT ACGGTCTGTN AAGCTGCTGC CCCTGAGCTG GAGGGGGGTC TCATTCTACA AAGAGAGAGG  
TGGCCCCCT TTCTTGACCT CCTCCTCCTT CAAGTCAAA CACCACCTCC CTTATTGAGG ACCGGCACTT CTTAATGTTT  
GTGGCTTTCT CTCCAGCCTC TCTTAGGAGG GGTAAATGGT GAGTTGGCAT CTGTGAACCT TCCTTTCTCC TTTCTTCCCC  
TTTCTCTGCC CGNCTTCC ATCCTGCTGT AGACTTCTTG ATTGTCAGTC TGTGGTCACA TCCAGTGGAT TG

SEQ ID NO:2400: (Length of Sequence = 366 Nucleotides)

CTGGGAAGG ACTGGCACAA GTTCTGCCIN AAGTGGAGC GCTGCAGCAA GACGCTGACG CCCGGGGGCC ACGCCGAGCA  
TGACGGGAAG CGTTCCTGCC ACAAGCCGTG CTACGCCACC CTGTTGGGAC CCAAAGGCGT GAACATCGGG GCGCGGGCT  
CCTACATCTA CGAGAAGCCC CTGGNGGAGG GGCCGAGGT CACCGCCCC ATCGAGGTCC CCGCGCCCC AGCAGAGGAG  
CGGAAGGCGA GCNGCCCCC GAAGGCNCA GCAGGCCTC CAGTGTACC ACTTTCACCG GGGAGCCCCA CACGTGCCCG  
CGCTGCAGCA AAGAAGGTGT ACTTCGCTTG AGAAGGTGAC GTCTCT

SEQ ID NO:2401: (Length of Sequence = 385 Nucleotides)

CATCCACCA GGGATTAGGG TTCAAGTAGC AGCTGCTAAC CCTTGACCA GCCCTTGTGG GACTCCCAAC ACAAGACAAA  
GCTCAGGATG CTGGTGATGC TAGGAAGATG TCCCTCCCT CACTGCCCA CATCTCCCA GTGGCTCTAC CAGCCTCACC  
CATCAAACCA GTGAATTTCT CAATCTTGCC TCACAGTGAC TGCAGGCCA AGCGGNCATC CACCAAGCAT CAAGTTGGAG  
AAAAGGGAAC CCAAGCAGTA GAGAGCGATA TTGGAGTCTT TTGTTTATT AAATCTTGA TTTTTTTTT TCCCTAAGAG  
ATTCTCTTT TAGGGGAAT GGGAAACGA CACCTCATA AGGGTTTCAA AGATCATCAA TTTT

SEQ ID NO:2402: (Length of Sequence = 392 Nucleotides)

AAAGAACTTG GTATCTCTAT TAAAGTACAT GANCTCCAA GGAAATAGA GOGATTTACT CTTCTCCAAT CAGTGCATAT  
TTACAAGAAG CACAGAGTTC AGTATGAAAT GAGAACAATT TACAGATGTT TAGAGTTAGA ACATCTAACT GGAAGCACAG  
CAGATGTCTA CTTGGAATAT ATTCAGCGAA ACTTACCTGA AGGGGTGCC ATGGAAGTAA CAAAGACACA ATTAGAACAG  
TTACCAGAAC ACATCAAGGA GCCAATCTGG GAAACACTAT CAGAAGAAA AGAAGAAAGC AAGTCATAA GCCTTCAGGG  
AGGCCATTTT TGCCTAAATT TTGAAATGAG GGTGGGCCAG ATGAGTATGT TTAAGTGGAG AGTGCTTTCC AG

SEQ ID NO:2403: (Length of Sequence = 179 Nucleotides)

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TCATTAAGTT ATACTCTTGG ATAGGAACAC TGAGGAAAAA TGAAAGATGA GATTTGCAAT AGGGATTCTC TAATTCTCAT  
GTTAATCTGT TTTGTACCAT TTTTACTTTG TCTTTTGTGG ATCTCTTCTT TTTATTAGAT GATATTAAAG GGGATTAAAG  
TTGTATTGTA TGAAATGTC

SEQ ID NO:2404: (Length of Sequence = 399 Nucleotides)

TTCCCAAAGT GGTGTGAACA TTTTACACTC CTAATAACAG TGCATGGGAA GCCAGTTTCT CTATATCCTC TCCAACATTT  
GGTGCTGTCA ATCTTTTAAA ATTTTAGCCA TTTTGTGGT TGTATAGTGT TATCTCATTG CAGTTTAAAT TTGCCGATCC  
CTGAATGTGT GTAGGTGTGT ATATGTATTA TATAATATAT ATATNATNCT TTCACTTATT TTGAAGTAAT TTCAAAGTTT  
CCAGAATAAT ATCAAGAACT CCTGTACTCC CTTGCCAGA TTCTCCAATT GTAATGTTTT ATTGCATATG CTCCATTGCC  
CATCTCCTC TCTACTTATA GCTTGCAITTA GTGTTTCTCT GGAACCNNTA GAGATGAAGG TGGAAAAAAG GATGCGGGT

SEQ ID NO:2405: (Length of Sequence = 404 Nucleotides)

GGAACAGAGT GACCTGACCA CCCTAACATC AGCTGCATAC CAGCAGAGCC TGACTGTTC A CACAGGAACT CATCTCCTCA  
GCATGCAGGG GAGCCCTGGA GGACACAATC GCCCAGGCAC CCTCATGGCA GCTGCAGAG CCAAACAAAT GTTTGGACCC  
CAAGTGCTTA CGACCCGGCA CTACGTGGGC TCAGCAGCTG CTTTTCAGG GACACCAGAG CATGGACAAT TCCAAGGCAG  
TCTGGTGGT GCCTATGGGA CTGCTCAGCC CCCACCTCAC TATGGGCCA CACAGCCAGC TTATAGTCCT AGTCAGCAGC  
TCAGAGCTCC TTCGGCAITC CCTGCAGTGC AGTTACCTAT CTTAGCCAC AGCCACAGGC CTATGCTGT GCATGGGCCA  
TTTT

SEQ ID NO:2406: (Length of Sequence = 280 Nucleotides)

AAGAGAGAAC ATTTTATTG TCTATAATTA GGTAAACAG TTGGGTAAAA YCTTACTAAA AGAAAGTTAA GGTGTCTTA  
ACACAAGATA TATAATGNC AATAATYAGTT AATTAATTT YAATTAAM CAGCTGCTTT GGAAATCCAA CATGTATACT  
TCAAAATAAT TTACCTAAAT AACTTATGAA AATGGATGTT ATTGTACAAC TCATCTCTCC TTATAAAAGG NGAACAAAGG  
ACATAGGAAA GCTGAAAAGA AGGCTAGATG AAGATACAGG

SEQ ID NO:2407: (Length of Sequence = 350 Nucleotides)

TCCAAGGCA ATATAAATTA CAGTATGCAA AACATACTGA CTGGCTGAGG TAAAACGCAC TGCTCCTGCC TCAGTCCACC  
ATGAGGGGAA ACACACATAT GCTTTTAAAA ACATCTGGCT TATAAAAAA CATCCCTAG AAAGGCTCC AGAGAGGGGC  
TGTGAGGCTC ACCCTCTGCC GCGCTCAGGA GGACCCGCG GCTCAGCCCT GGCCCTCCA CTGCAGCCAT GGTGGCGCC  
TCCCCCTACT GCTGCCCAG GGTCTGTCC AGGTGCTCT TGATGGTGT GAGGAAGTCC GTGGTGTTC GGAAGTGCTC  
GTTAGCTTC ACATTGCTGA GGCCGTGAAT

SEQ ID NO:2408: (Length of Sequence = 239 Nucleotides)

ATNGNTTGG GGTCCNAGA AATGGATGTG CGGAAGAAGA AGAAGAAAAA AATCAGCAG CTGAAAGANC CAGAGGCAGC  
AGGGCCTGTG GGGACAGAGC CCACAGTGA GACACTGGAG CCTCTNGNAG TCCTGTNCCC GTCCACCACC AAGAAGAGGA  
AGAAGCCCAA AGGGAAAGAA ACCITCGAGC CAGAAGACAA GACAGTGAAG CAGGAACAGA TTAACACTGA GCCTCTAGA

SEQ ID NO:2409: (Length of Sequence = 331 Nucleotides)

TCTTTCAAG AATTTTCAGC CAATCGACG TCTGTCTCT TTAAGGCTTA GGAAGAGCAG TGTGGCTGCC CCTTTAAGGA  
GGCGTTCAC CAAACCATAT TGGACAGAG ATGGGGGCGA CTAATCGGGA CCGAGCGGC CTCTGACTCC AGCAATACAG  
CGAATCAGG GCTTTCCGGA ATACATTTTT CGGAAAAAGA CTTCTCCTC GGTTTTCTGC TCTGCACAG TTGAAATTTT

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CCCCAGTTTT TCCTGCAGAT CGGGAGTCGA GCAATGCCTA CCCCCGCTC CCGCACCAGT TGGGCGCTCC CGGATGATGC  
CCTACCCCTT T

SEQ ID NO:2410: (Length of Sequence = 135 Nucleotides)

CTGCAGGACT TGCGAAGAGC GTGCATTCCC AGTGGGCGAA CGGGAATTCG AACGGAGAGA GGGTTATCTT GTGGGGGGCT  
ACCCGTGGAG AGCAAGGCGC CCCAGGGGT TGGTCCGGTG AAATTNAGGT CGCCC

SEQ ID NO:2411: (Length of Sequence = 330 Nucleotides)

ATGCTGCTCG GTTCTCTTGT CCCCCAACT TTACCGCGAA GCCCCAGCT CAGAGTCCCC TCGTTTCTCC TTGGAGGCGC  
TGACGGGTCC AGATACGGAG CTGTGGCTTA TTCAGGCCCC TGCACTTTT GCCCCAGAAT GCTTCAATGG GCGGCATGTG  
CCTCTNTCTG GCTCCAGAT CGTCAAGGGC AAATTGGCAG GCAAGCGSCA CCGCTATCGG AGTCTCAGC AGCTGTCCCC  
AAGCTGGAGA AGCGACCTG CTGGCCCCCT CAANGGAGGC AGGAGGTGGA CTCACCTGTG CTTAGCCCC CCAGGGCACC  
CTAAGGATCC

SEQ ID NO:2412: (Length of Sequence = 583 Nucleotides)

TGCACCGTIG CACCAGGTGC CCGTGTGGAT TGTACAGNN ACGTGGGTNA TGAAGGTAAC CAOCTACCGN GTGCACGTGG  
CCNAGCAGCA GGACGTGCAC CTGACTGTNA CGGAGTCTCG GCAGCATGAG CTCTCGCCAG ACTCGAACTT GCCCGTGCAG  
CTCTCACCA TCCGTGTGGC CAGCACCAAC CCTGCTGTGC AGGCCTTTGA CATCTGGCTG AACTCCACTG AGTACGGGGA  
GCTCTGCGAG AAGCTCCGGG CACCCATCCG CAGGGCAGCC CATGTGGTCA TCCACCAGAG CCTGGGCGAC CTNTTNTGG  
AGACATTTGC CTCCCTGGTA GAGGTCAACC CGGCCTACTC AGTGCCAGC AGCCAGGAGC TGGAGGCCTG CATAGGCTTG  
CATGCAGACA CGTGCCAAAG TGAAGNTGGT GAAGACCTGC CAGGAGTCAG CCACAGGGGA GTTCCAGCAG TTTAATTNC  
CGCCCCATGT TGGTGGCTTA ACTTGATNGG GAAAGTGGT TNGNCAAGCG GCAAGACCCC CTGGGNCCTT NAACTTGT  
TGCCAAACGG GGTNCTGCA TGG

SEQ ID NO:2413: (Length of Sequence = 203 Nucleotides)

TGTCCTCCC ACCCCCTAGC CATGCAGNGG TGAATNGGG AACCCAGNN GGGGCTGAG AAGCTCCAGG CCACCTTNAG  
GGAATCCAG AGGCTCTTTC TACCAGGAAG AAGTGCCGCA GCTGCGTGGC CGCCGAGACC ACGCGGGAGG TGATCTGGTG  
GGACAAACGT TCCGTCTGCT CCGAGTCAG GAGATCGAGT CTC

SEQ ID NO:2414: (Length of Sequence = 92 Nucleotides)

AAGGGGCAGG ATGGGCTGG GAAGTCCAAC CCCACGCATT TGGGCTCAGC CTGGACATG GAGGCTGAC AGCTGTTGTC  
CTTTGGGGAT CC

SEQ ID NO:2415: (Length of Sequence = 401 Nucleotides)

CTTTTCCCTT CTGTGNCCTA AATGCANCA CTNNATACAC GTTGCTTAAC CTAGAANCGT GGCTCCACCG TGAATTCCTAA  
TTGGTCCGTG CTATCGAGGC ACTGTCCCTT TAACTGGTCT CGTCCAGTG GCCCCNACTG CTTTCTCTCC TCTTCCAGNA  
ATGGCTCTTC GGGCCAGAG TTCGAATCTC GCGATCGGGA TGGGACGGA GTACCGGCTT GGGGTGTCCC AGAGCCCGGA  
CTGAGCTGGG GAGTCAAGAC CTCGGGCGAT GAGGGCTGAG CAAGTCGGAG TCGTAGGTCC AGTTCTTCCC CAGCTTCTCC  
TGCTCCAAT CIGTTGGGT CTTGGGGTTC TTGCTCTCC AGCGGAGTGG AGCTGCTGTT GGAAGAGTCC TCCCGGATC  
C

SEQ ID NO:2416: (Length of Sequence = 245 Nucleotides)

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ATGTAATACA GTGTAGAAAG CGATCATGTC ATAAGCAATG ATTCTGTACA ATCATNCNGC AGAAAATTAG TTTTGGAGAA  
 TTCTTGGTAA TTGAAGACCA GCAGAGCACC CCTCCCCACC CGCCCCCTAA AAGTGCTTAC AATTACAGG GATYCTTTTC  
 TTTTCAAAG ACCCAAAGAY ACGTGGTCAG AAAAMAAAAG CTTGAAGTCT CAATGCCTAA TGTCGTGCAC ATTKNACAGG  
 GACGC

SEQ ID NO:2417: (Length of Sequence = 384 Nucleotides)

GGTTTGGCAA GATGATGGAA CATCCATAA GCCCAGGTGT GCAGCTAACC TTTAGAAGCT GGAAAAGGCA AGGAAACATA  
 TTCTGTAGAG CTOCAGAAG GAACACAGT CTGCACACAC TTTGTTTTTA GCTCAGTGAA ACTGATTTTG GACTACTGAC  
 CTTCAGAACT GTAAGATAAA TTCTGTGTGT TTTACGTTTG TGGTGTATA GAAGTTACAG AAATGAATAT ACTTACCGTA  
 GTTAGAGAG AGATGGGAGG ATACTTTTTT TTCTCCCTTC TTTTGAAGG GAGGTAGGTC TCCTTAATC CAGAGGAAAG  
 ACTTGCTTT CTTCATATAG GGGCCCTTG ATTCTTAATT CATGGGAGTT GTTAGGAGA TTGA

SEQ ID NO:2418: (Length of Sequence = 1645 Nucleotides)

GTGATGGCTG CCTTGAGGGG GACCATCATG TOGGAGACCG CATTGGTGCA GGTCCTACCC CACAGCCCAT GCCCAGCCTC  
 CTGCAGACTC AGGTATCCA GCTGGTCGAT GGCCTTTTGC ATACCTGGTG CCTTCTCTC TOGGGCTTG CAGGCTTCTC  
 TGGGGGCTTC TCAGATGACT CTTTGGCTT CTTCTCTGTC TTGCTAACT CCTTGGCCAG CTCTGAACGT GCCTCCTTGG  
 CTCCCTCTTC TACCACCTCC TCCCGTTTGG CCAACTTGCT CACGGCCGTC TTGGTAGTGG CTTTGAGGCT CTCCTTGCTA  
 TCAGCCCGCT GTTTGATTTT GCTGGGCTTG AGGTGGTAG GCACAGCCCC AGAAGCCAGG NCCTTCTGG TGGCCACAGG  
 GTAACGCAGG AAGTCCAGAT GCGAAGCTT TTCTAGGCC TCCAAGATCT TGTMTTGGG AGCATTTCCT GGAAAAGCA  
 CACGCACAT CTTCTCAGTG GGATTGGCTG GTAGCCAGAC CACCAGAGCA GTGATAGAGG TAAGGTAGGG CACGGAGATC  
 TCAGCCCTCT TOCCATTGGG CAGCAAGATG CCGTNTTGG CTTTACTATT GCCTGCCAC TTTTGCAATGA GGAATGCAAT  
 CTCCTTGCTG TCCTTGACAG GGTGAGGAC ATACATGTCC AGCGGCCCC CACCCATTTT GTGAAGAGG GTCAGTGGCT  
 CAATGGTATT GCTGACCACA CGATATAGAG GCTCAGCCTG GATGCCAGG CGGTTTAAGT GCTGCAGAGT GAGGCAGGCC  
 TCCTCAATGC TACGCTTGGC TTTCGGGAG GCATCAGGAA GCGCAGCTT CTCAGGCAGG TTGAAAAGA CAACTCCAAG  
 CTCAGGANAG ATAAGGTTCT TCACCCAGTC GCTGTAACTG CTAGAGCCCT GGNACTGCTC CTCCTCTAGC TCTGCCACTT  
 TCGCTGCAG TAGTCCATTG ATGCCTGGCA GGTGTCTGTC CCCAATGTGT GTNAGTAGCA CCGAGTCAAT CGCGTCCAAG  
 TNCCTTACCA GCTTCCAAA ACAGGACTTG CGATCAGAGC CACCATCCAC CAGGATGTTG AAACCATGA CAGCAAAGAG  
 GGCAGAGTCC CACGACCAC CTGGGAAGAT GTAGCAACAA GGCTTGGAGA GCTTGAGGAA GCGCCCTGAG GTGGGGGGCT  
 CTAGTAGGTC AAATGGGAT GGCAGTCCA CAGTCTCAGA GACATACTG GAGAACTCAG CCACGCCGTC CATGGTGGGC  
 AGAGTGGGCT CAGGGTTTAG CCGGAGGTGC AGGGTCTCTT GGGAACTGGA TAATCCAGG TGGCTCCAAT CACCTTCCCC  
 TAAGCAGGAC ACGGTAAGGA AGGCCTGTAT CCCAGGGTCT CTATTGCTGA GCAATTGGGA AATCTCGGGG TTGTGAAGGA  
 CCTGGGCAAA GTTTTCATAT GAGTAGGTGC CACTCTGTAG GATGAGGTCT CCCCCAGGCT CTAAACTTTG CCCACTCAAG  
 ATTAGTAGTT TATAAGCTGA TGAGCTGCTA AGAAGATGAT GAACCTCAGA GCTGATGCTG TCTGCACTGG GATTTACCAG  
 GATGATGGTC TCTAGGATCT CACTCTGGTG GCAAAGGGTC CTCCTG

SEQ ID NO:2419: (Length of Sequence = 837 Nucleotides)

GGAAGGATGA GAAACAGATT TGTGCTCACT TCATGGGCTG GCGTGAATT GACGATGGTG CAAACCCAAA TATCCTGAT  
 GTAATTNATG AAGATTATGG AACTGCAGCG AATGACATCG GGGACACCAC GAACAGAAGT AATGAAATCC CTTCCACAGA  
 CGTCACTGAT AAAACCGGTC GGGAACTCT CTGGTCTAT GCTGTGGTGG TGATTGCNFC TGTTGGTGGGA TTTTCCCTTT  
 TGGTAATGCT GTTTCINCTT AAGTTGGCAA GACTCTCCAT GTTGTGGCAG AAGGTTTTTG TTTGTTTTCA TAGATCCCA  
 CTGGATGGGT AGCTGAAATA AAGGAAAAGA CAGAGAAAAG GCGTGTGGTG CTTGTTGGTT GATGCTGCCA TGTAAAGCTGG  
 ACTCCTGGGA CTGCTGTGG CTTATCCCGG GAAGTGCTGC TTATCTGGGG TTINCTGGTA GATGTGGGCG GTGTTTGGAG



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GCTGTACTAT ATGAAGCCTG CATATACTGT GAGCTGTGAT TGGGGAACAC CAATGCAGAG GTAACCTCTCA GGCAGCTAAG  
 CAGCACCTCA AGAAAACATG TTAAATTAAT GCTTCNTTC TTACAGTAGT TCAAATACAA AACTGAAATG AAATCCCAAT  
 GGATGTACT TCININCTGA AAAGTGTGCT TTTTGACCCT ACTGGACATT TATTGACTTA ATTGCTTCTG TTTATTAAAA  
 TTGACCTGCA AAGTTAAAAA AAAATTAAAG TTGAGAACAG GTATAAGTGC AACTGAATA GTCTAATCTA CATGTAACAC  
 ATATTINNGT ATGATTTTCT ATACTCTAAT CAGCACT

SEQ ID NO:2420: (Length of Sequence = 1843 Nucleotides)

GAAGCTCCGG CCCAGGTGGC CGCTGGCTGC TGAGCTCAGC CCAAGGTGCG GCTGTGGTGG TGGTGGTGGC GGCTGCAGGC  
 TTTGCTGCTG CTGGATGTTT GCTGGCTGCA GGTCTGCTG CTGCATCTGT AAGTTTGTG GCTGCACCTG CTGGGTCTGC  
 ACCAGGTGAG GCTGGGTGGC CAGCCGGGTG CTGGGCAGGC CCTGGTAGCT CATCATCTGG GACAGGGCGC TGGCAGCAAG  
 GCTACTGTGC AGCGGGCCTA CCATGCCATG CTGCAGGGAG GGGGCTGTG TGCTCAGGGG GCCTGGTGCC AACTCCCCC  
 GCAGAGGGTT GTATTGGTTC GGCACCATGC CGTCTGCAG CCGGGACAGC CACTGCAATT GACCATTCAA ACTGGTGGAC  
 CCGNCCACAG TGAATTCAG GGGCCCTCCG CTGCTNGAGC CCAGGACGGT GCTGGTGCCA GAGGCCACAG GCAGGTGGGA  
 GAGACGAGGT GGGCCAGTNT TAAAGGCCAG CCGGCCGCC CCACCCANCG CCGCCATYTC GGGCTTGGCC GCCACGTTCA  
 GGTNCCCNAT GCCCAGGTGG GTGTGGGGCA TYCCAGGCAG GTGGTTGAGG GGCACGGACG GAGACTGCTG GAACGGGGAG  
 GGCAGNAGTG GCGGCGAGGC CACGTCTGAC AGGTAGCCAT GGGGTGACTC CAGGGAGTCC ACGGGCGAGA GCATGCCGGA  
 GCTGTCCAGC AGGCAGNCTT TGCGTCTCTG GGACTTCTTC CTCCTGTGCT TGAGGTCTTT GGCTCTCTTG CTTCCACAGG  
 CCAGGCCTTT GCTGCTGGGC TTGCGGACCT TCTTGCCCTG CACGCCGGGC TTGAGGCTGC CCAGGTAGCC GTTGGCGGAG  
 CAGAGCGNGG GCGACAGGGT GGGCGTGCCC CCCAGCGGGC TCCGTGCAGC TGCGGGCTGC GCACCAGGTT GTACTCTGTC  
 AGCAGCCTCA CGATGTCTG ATGCATGCNC TCCTNTGCGA TGTGCGCGG CAGGCGGTCC ATATGATCCG TGAATGCCG  
 GTTGGCAAAG TGTCCAGCA GCACCTTGGC GGTCTCTGAG CTGCCCTCCC GGGCGGCCAG AAACAGGGGT GTCTCTCTCC  
 TGTGTCTCTG CATATCTTTG TTAGCCCCGT TCTTCAGGAG CACAACGCG GCATCCACAT TGTTCACNGC GCGCGCCAG  
 TGCGGGCGG ACTTGCCAG GTNATCTACG GCGTTGACGT CCGGTGTGA GTTGATGAGG TCCTCCAGCA TGCCCTCCAC  
 GGCAGGCGG GCAGCCAGCN TCAGTGGCGT CGTGCCATCA TGCTATGCGG CATCCAGGTC TGTGGCTCGG TTCGGATCA  
 GGATCTTGA AGACACCTTG TGCGTGGCA GACACAGCG CATGCAAGCG GGTGCGGCC ATGTGTCTCT GGATGTTGGC  
 ATCTGCGCTG GCCTCCAGCA GCGCTTGGC GGCATCAGAG CGTGAGTAGC GGGCGGCCAG GTGCAAGGCG GTCTCGCCCG  
 TNCGGTCTGT CTGGTTGTG AAGCTGGCGC CCTGGTAGAT GAAGTCGGAG ATGACGGCGG GCGGTCTCTC CTCTCTCTCG  
 CTGTGCCCCG TCTCCAGGCC GCCCCCGCTG CAGGAGGCGA TCATGAGCGG GGTGAAGCCA TCAGSCCCGC GGACATTGAC  
 GTCCATGCAG TCGCGTCAA CCTCACCTG GGGCGGTGTG GGGCCATGG CANACATGG CAGGTCCAGG GCATCCAGGT  
 GCTGCTGAGT CCACTGCCGG TGGTCTGTCT GGTCTCTGAG GTGAGGCGA ACCACGGGCT CCTCGAACC GAACTTCTTG  
 GTC

SEQ ID NO:2421: (Length of Sequence = 1452 Nucleotides)

CCAGCAACTC AAATTCACCA CCTCGGACTC CTGCGACCGC ATCAAAGACG AATTTACAGT ACTGCAAGNT CAGTACCACA  
 GCCTCAAGCT CGANTGTGAC AAGTTGGCCA GTGAGAAGTC AGAGATGCAG CGTCACTATG TGATGTACTA CGAGATGTCC  
 TACGGCTTGA ACATCGAGAT GCACAAACAG GCTGAGATCG TCAAAGGCT GAACGGGATT TGTGCCAGG TCCTGCCCTA  
 CCTNTCCCAA GAGCACCAGC AGCAGGTCTT GGGAGCCATT GAGAGGGCCA AGCAGGTAC CGCTCCCGAG CTGAACCTTA  
 TCATCCGACA GCAGCTCAA GCCCACCAGC TGTCCAGCT GCAGGCCCTG GCCCTGCCCT TGACCCCACT ACCCGTGGGG  
 CTGCAGCCGC CTTGCTGCC GCGGTGAGC GCAGGC'CCG GCTCTCTC GCTGTCCCG CTTGGGTTCC CAGGCCACCC  
 TCTCAAGGA AGACAAGAAC GGGCAGGATG GTGACACCCA CCAGGAGGAT GATGGCGAGA AGTGGGATTA GCAGGGGCGC  
 GGGACGGGA GGTGGGAGG GGGACAGAG GGGAGACAGA GGCACGGAGA GAAAGGAATG TTTAGCACAA GACACAGCGG  
 ANTCTGGGAT TGGCTAAACT CCCATAGTAT TTATNGTGGC CGCGCGGGG GGGCCAGCC CAGCTTGCAG GCCACCTCTA

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GCTTTCCTCC TACCCCATTC CCGGCTTCCC TCCTCCTCCC CTGCAGCCTG GTTAGGTGGA TACCTGCCCT GACGTGTGAG  
GCAAGENTAAG GCCTGGAGGG TCAGATGGGG AGACCAGGTC CCAAGGGAGC AAGACCTGCG GANGCARGCA AGCCCCNGCC  
CTTCCCCCGT TTTGAACATG TGTAACOGAC AGTCTGCCTG GGCCACAGCC CTCTCACCCCT GGTACTGCGT GGACGNAATG  
CTAGCTGCCC CTTTCCCGTN CTGGGCACCC CGAGTNTCCC CCGACCCCGG GTCCCAGGTA TGCTCCCACC TCCACCTGCC  
CCACTCACCA CCTCTGNTAG TNCCAGACAC CINCAGGYCC ACCTGGTCCT CTNCCATGCG CCACAAAAGG GGGGGCACGA  
GGGACGAGCT TAGCTGAGCT GGGAGGAGCA GGGTGAGGGT GGGCGACCCA GGATTCCCCC TCCCCCTCCC AAATAAAGAT  
GAGGGTACTA AAGTTGTCTT GGTTTTATTT TTATTATTAT TTTTTCCTTT TTCCAGTATA CTAGCTGTGC TTTTAAGAAA  
GGGGATATTA AAAAAAAAAA AAAGACAAA GTGTTTTTAA AAAAAAGCAA CACCCACACC TGGTGTCTGT ATATAGTCAG  
CTTATCTCGT GTTCAATCGT CTGATCTCTA CAGAGAGAAG TGGAAAATGC TGTATCAAGG GTGGGCTTAG CTGTGCCTTT  
CCAATAAGA TG

5     WHAT IS CLAIMED IS:

1. A purified polynucleotide having a sequence designated as one of:

SEQ ID NO: 316 - 2421, except SEQ ID NOS 650, 1834, and 2073;

10             or having a sequence complementary thereto.

2. A purified polynucleotide having a sequence designated as one of:

SEQ ID NO: 316 - 2421, except SEQ ID NOS: 485, 650, 1834, 2073, 2092, and 2353;

15             or complementary sequence thereto or, for those sequences over 150 nucleotides long, a portion thereof at least 150 nucleotides in length.

3. An isolated polynucleotide that includes a sequence designated as one of:

20             SEQ ID NO: 316 - 2421, except SEQ ID NOS: 485, 650, 1834, 2073, 2092, and 2353;

or complementary sequence thereto or, for those sequences over 150 nucleotides long, a portion thereof at least 150 nucleotides in length.

25     4. An isolated polynucleotide operably coding for a native human polypeptide or protein, which includes a region coding for the same amino acid sequence as a native human coding region corresponding to a sequence designated as one of:

SEQ ID NO: 316 - 2421.

30     5. The polynucleotide of Claim 4, wherein said SEQ ID NO is listed in Table 6 and is one of SEQ ID NOS: 316-2421.

6. The polynucleotide of Claim 4, wherein said SEQ ID NO is listed in Table 7 and is one of SEQ ID NOS: 316-2421.

35     7. The polynucleotide of Claim 4, wherein said SEQ ID NO is identified in Table 10 in a metabolic functional grouping and is one of SEQ ID NOS: 316-2421.

8. The polynucleotide of Claim 4, wherein said SEQ ID NO is identified in Table 10 in a structural functional grouping and is one of SEQ ID NOS: 316-2421.

5 9. The polynucleotide of Claim 4, wherein said SEQ ID NO is identified in Table 11 in a developmental control grouping and is one of SEQ ID NOS: 316-2421.

10. An isolated polynucleotide coding for a human protein or polypeptide, which includes a coding region corresponding to the EST identified as:

10 SEQ ID NO: 316 - 2421;  
or a polynucleotide complementary thereto.

11. The polynucleotide of Claim 10, wherein the SEQ ID NO is 316-1000.

15 12. The polynucleotide of Claim 10, wherein the SEQ ID NO is 1001-1500.

13. The polynucleotide of Claim 10, wherein the SEQ ID NO is 1501-2000.

14. The polynucleotide of Claim 10, wherein the SEQ ID NO is 2001-2421.

20 15. The polynucleotide of Claim 10, wherein said polynucleotide further includes the entire sequence designated as any one of SEQ ID NOS: 316-2421.

25 16. An isolated polynucleotide comprising at least 150 bp of a sequence of Claim 10 and wherein said SEQ ID NO excludes NOS 485, 650, 1834, 2073, 2092, and 2353.

30 17. An isolated polynucleotide sequence, which hybridizes to a sequence designated as any one of SEQ ID NOS 316-2421, except SEQ ID NOS 485, 650, 1834, 2073, 2092, and 2353, or to a sequence complementary thereto, under hybridization conditions sufficiently stringent to require at least 97% base pairing.

18. A polynucleotide according to any one of Claims 4-17, in substantially purified form.

19. A construct in isolated form comprising a vector and a polynucleotide according to any one of Claims 1-17.

35 20. The construct according to Claim 19, further comprising a promoter operably linked to said polynucleotide.

21. A panel of at least 100 isolated polynucleotides having the sequences of Claim 3 or Claim 16.

22. An antisense oligonucleotide capable of blocking expression of any one of the polynucleotide-encoding sequences of Claim 10.

23. A triple helix probe capable of blocking expression of any one of the polynucleotide-encoding sequences of Claim 10 having at least a 10-base homopurine or homopyrimidine sequence, said probe comprising single-stranded DNA having at least a 10-base homopurine or homopyrimidine sequence and being adapted to bind to the major groove of double stranded DNA which includes said polynucleotide-encoding sequence.

25. The polynucleotide of Claim 1, wherein said SEQ ID NO is 913.

26. The polynucleotide of Claim 1, wherein said SEQ ID NO is 1039.

27. The polynucleotide of Claim 1, wherein said SEQ ID NO is 1395.

28. The polynucleotide of Claim 1, wherein said SEQ ID NO is 1567.

29. The polynucleotide of Claim 1, wherein said SEQ ID NO is 1667.

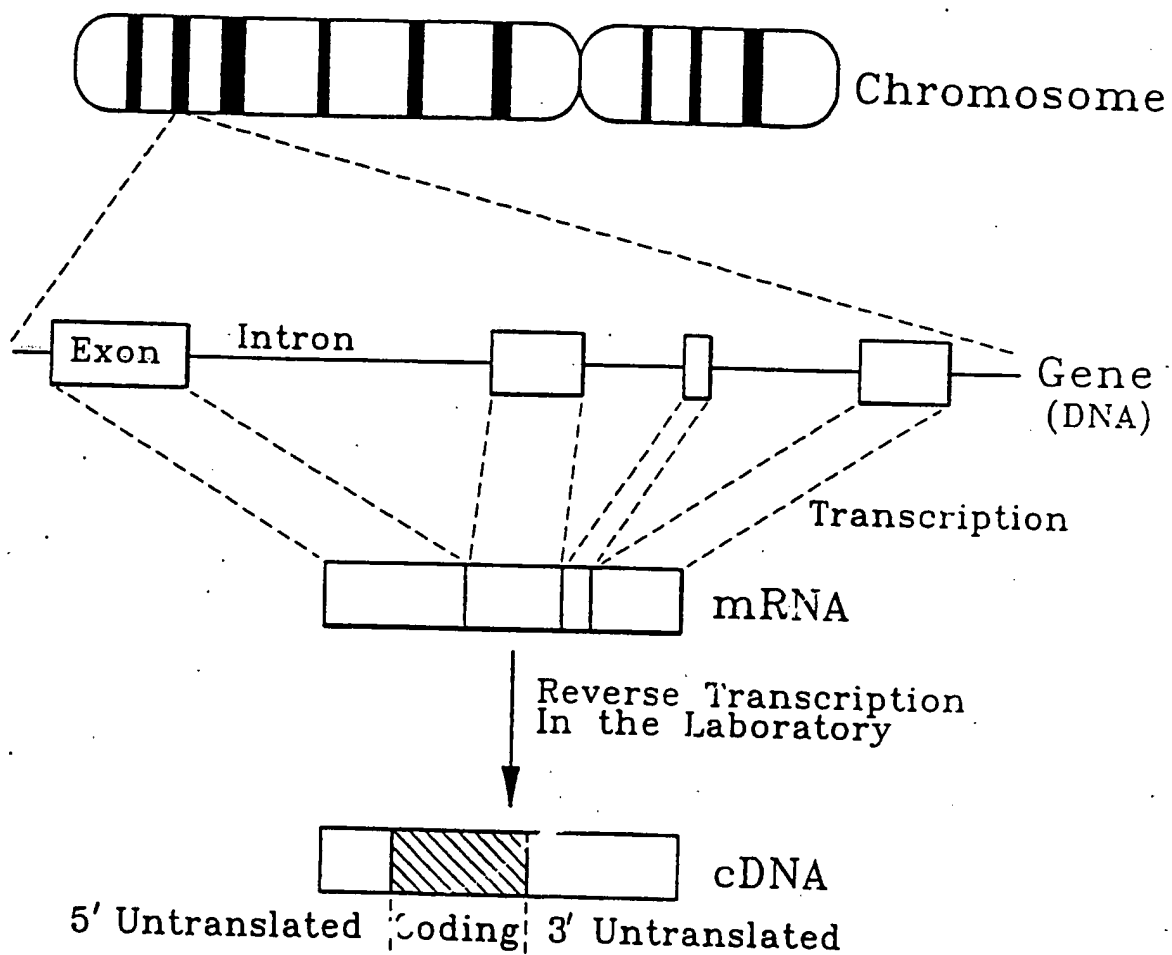
30. The polynucleotide of Claim 1, wherein said SEQ ID NO is 1704.

31. The polynucleotide of Claim 1, wherein said SEQ ID NO is 2089.

32. The polynucleotide of Claim 1, wherein said SEQ ID NO is 2297.

33. The polynucleotide of Claim 1, wherein said SEQ ID NO is 2302.

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**FIG. 1**